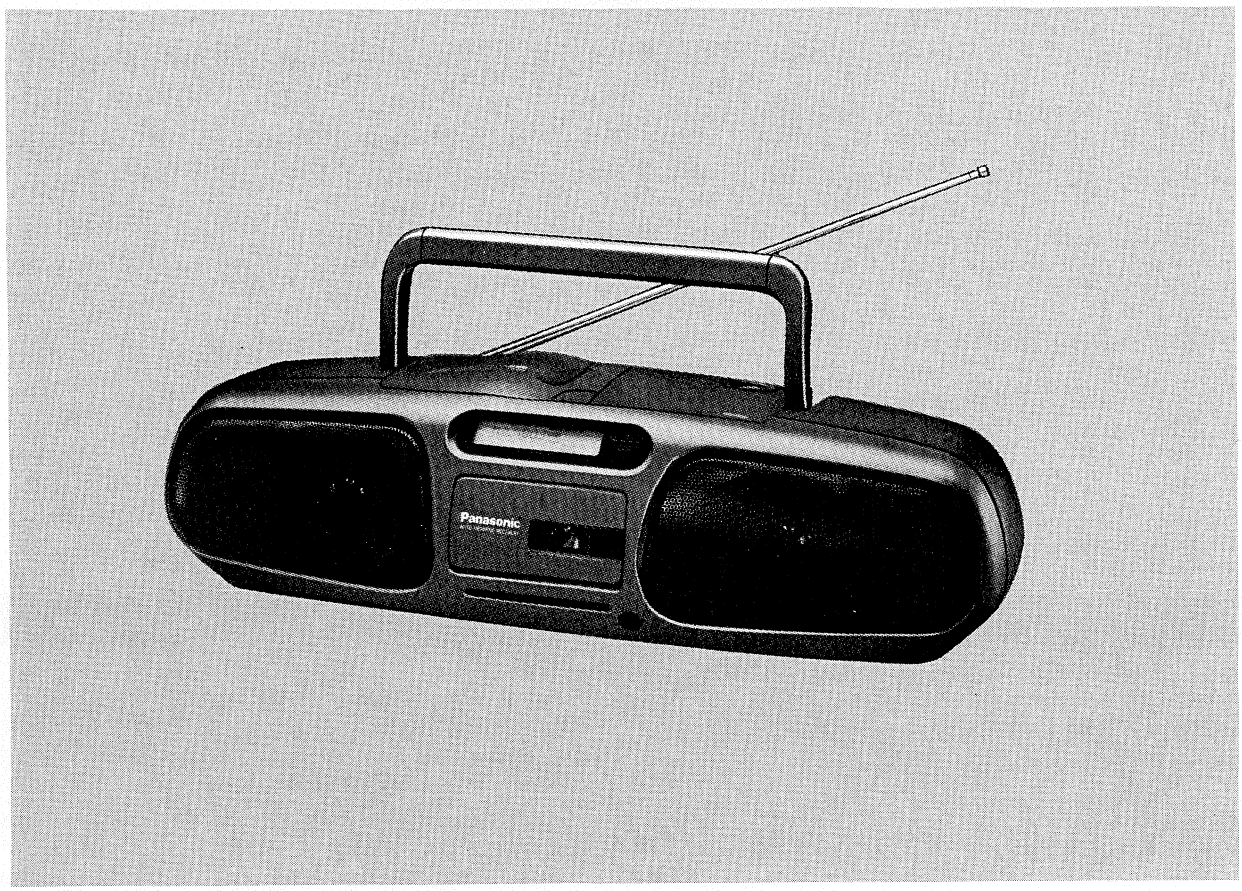
Operating Instructions

Mode d'emploi
Bedienungsanleitung
Istruzioni per l'uso

Portable Stereo CD System

MODEL NO. RX-DS45



Panasonic

Read these instructions completely before operating this unit.

EB EG

Thank you for purchasing this unit. For optimum performance, follow these operating instructions carefully.

ENGLISH 9–34

Nous vous remercions de votre achat de cet appareil.
Pour être à même de l'utiliser correctement, veuillez lire attentivement cette brochure.

FRANÇAIS 35–61

Wir danken Ihnen, daß Sie sich für dieses Gerät entschieden haben. Um die optimale Leistung erzielen zu können, lesen Sie bitte diese Bedienungsanleitung aufmerksam durch.

DEUTSCH 62–88

Vi ringraziamo dell'acquisto di questo apparecchio.
Per ottenerne le prestazioni migliori leggete attentamente queste istruzioni.

ITALIANO 89–114

- This apparatus was produced to BS 800.
- Cet appareil est conforme aux prescriptions de la Directive 87/308/C.E.E.
- Questo apparecchio è conforme al D.M. 13.4. 1989 (Direttiva 87/308/CEE) sulla soppressione dei radiodisturbi.
- VOLDOET AAN EEG RICHTLIJN 87/308 E.E.G.
- Dette apparat overholder det gaeldende EF-direktiv vedrørende radiostøj.
- Este modelo cumple con la norma EC (para interferencias de radio 87/308/EEC).

FOR UNITED KINGDOM

Important

THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.
BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows. The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.
Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

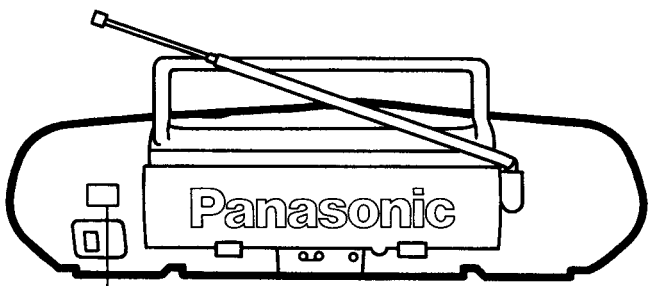
WARNUNG!
DIESES PRODUKT ERZEUGT LASERSTRAHLUNG.
DURCHFÜHRUNG ANDERER VORGÄNGE ALS DER HIER ANGEGEBENEN KANN ZU GEFÄHRLICHER STRAHLUNG FÜHREN.
REPARATUREN DÜRFEN NUR VON QUALIFIZIERTEM FACHPERSONAL DURCHGEFÜHRT WERDEN.

AVERTISSEMENT!
CET APPAREIL UTILISE UN LASER.
L'UTILISATION DE COMMANDES OU DE RÉGLAGES OU L'EXÉCUTION DE PROCÉDURES AUTRES QUE CELLES SPÉCIFIÉES ICI PEUVENT PROVOQUER UNE EXPOSITION À DES RADIATIONS DANGEREUSES.
NE PAS OUVRIR LES COUVERCLES NI ESSAYER DE RÉPARER SOI-MÊME. CONFIER TOUT TRAVAIL D'ENTRETIEN À UN PERSONNEL QUALIFIÉ.

ATTENZIONE!
QUESTO APPARECCHIO UTILIZZA UN LASER.
L'USO DI APPARECCHI DI CONTROLLO O DI REGOLAZIONE, O PROCEDURE DI UTILIZZAZIONE DIVERSE DA QUELLE INDICATE IN QUESTO MANUALE DI ISTRUZIONI, POSSONO CAUSARE L'ESPOSIZIONE A RADIAZIONI PERICOLOSE.
NON APRIRE I COPERCHI E NON CERCARE DI RIPARARE DA SOLI. PER QUALSIASI RIPARAZIONE RIVOLGERSI A PERSONALE QUALIFICATO.

BEMÆRK!
I DETTE APPARAT ANVENDES EN LASER.
BRUG AF BETJENINGSKNAPPER ELLER REGULERINGER ELLER FREMGANGSMÅDER UDOVER DE I DENNE BETJENINGSVEJLEDNING ANGIVNE, KAN MEDFØRE FARE FOR BESTRÅLING. ÅBN IKKE KABINETTET OG FORSØG IKKE AT UDFØRE REPARATIONER SELV. REPARATIONER MÅ KUN FORETAGES AF KVALIFICEREDE TEKNIKERE.

VAROITUS!
SUOJAKOTELOA EI SAA AVATA.
LAITE SISÄLTÄÄ LASERDIODIN, JOKA LÄHETTÄÄ NÄKYMÄTÖNTÄ, SILMILLE VAARALLISTA LASERSÄTEILYÄ.



DANGER-Invisible laser radiation when open and interlock defeated. AVOID DIRECT EXPOSURE TO BEAM.
(Inside of product)

VORSICHT-Unsichtbare Laserstrahlung, wenn Abdeckung geöffnet und Sicherheitsverriegelung überbrückt. Nicht dem Strahl aussetzen.
(Im Inneren des Gerätes)

CLASS 1
LASER PRODUCT

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

ADVARSEL: USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
(Indersiden at apparatet)

VARO! Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

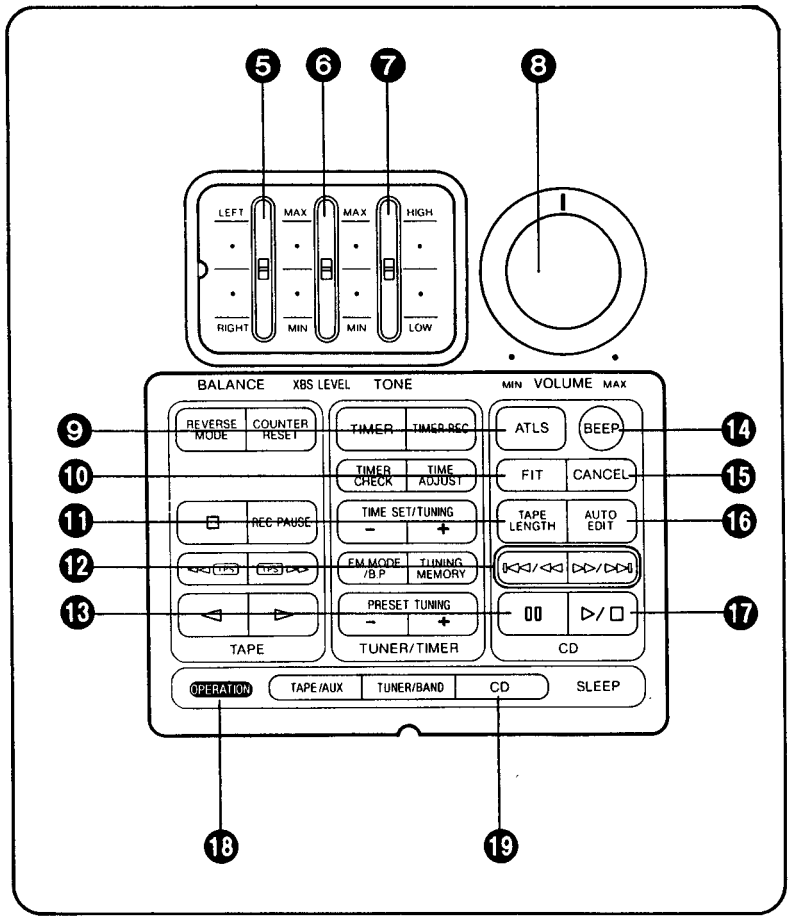
VARNING! Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

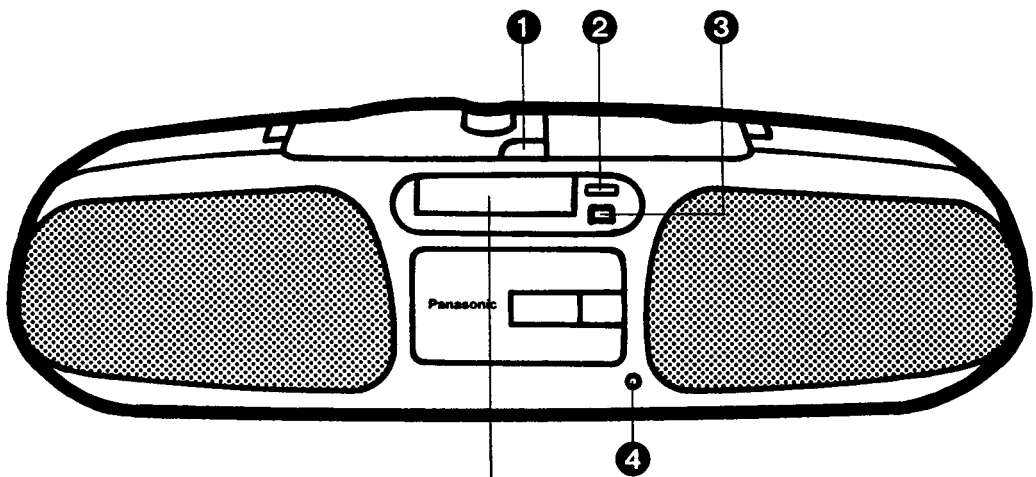
CD/GENERAL CONTROLS

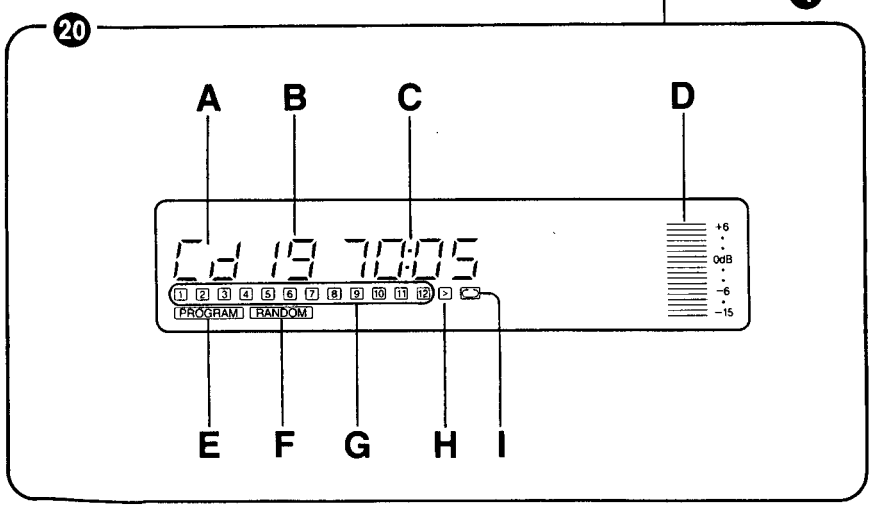
CD/ALLGEMEINE BEDIENUNGSELEMENTE

COMMANDES DE CD/GENERALES

COMANDI DEI CD/GENERALLI





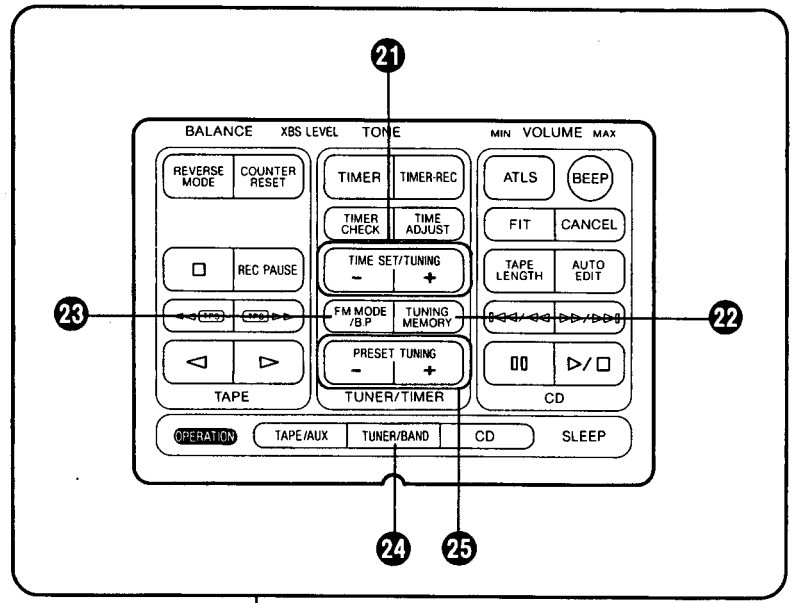


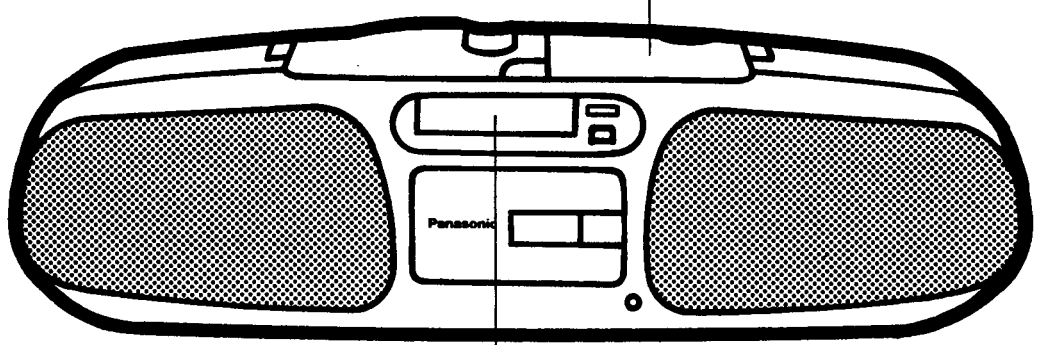
TUNER CONTROLS

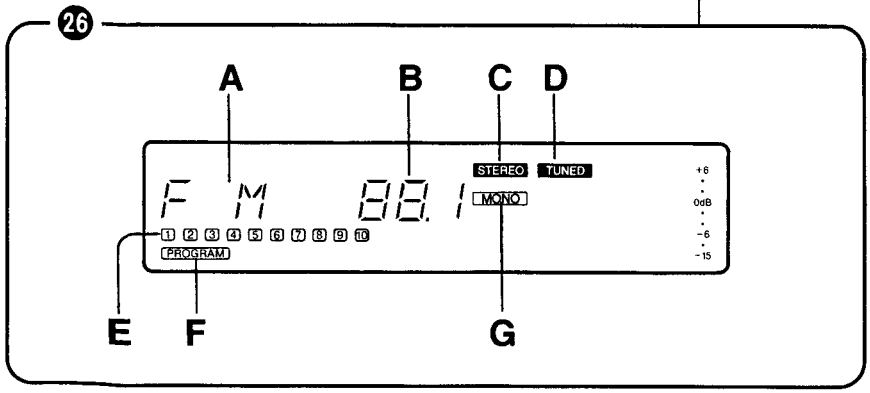
TUNER-BEDIENUNGSELEMENTE

COMMANDES DE TUNER

COMANDI DEL SINTONIZZATORE





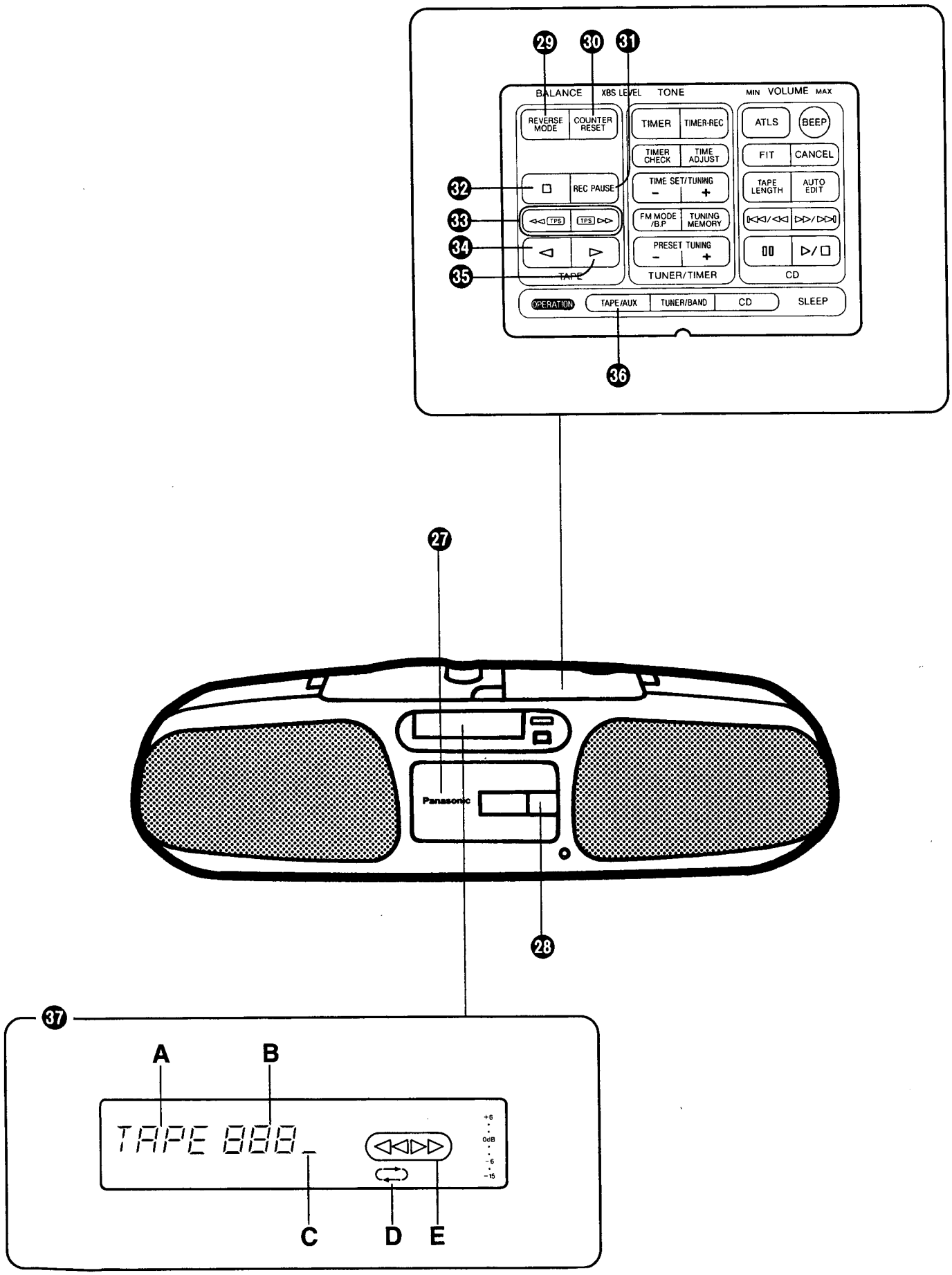


DECK CONTROLS

COMMANDES DE PLATINE-CASSETTE

CASSETTENDECK-BEDIENUNGSELEMENTE

COMANDI DELLA PIASTRE

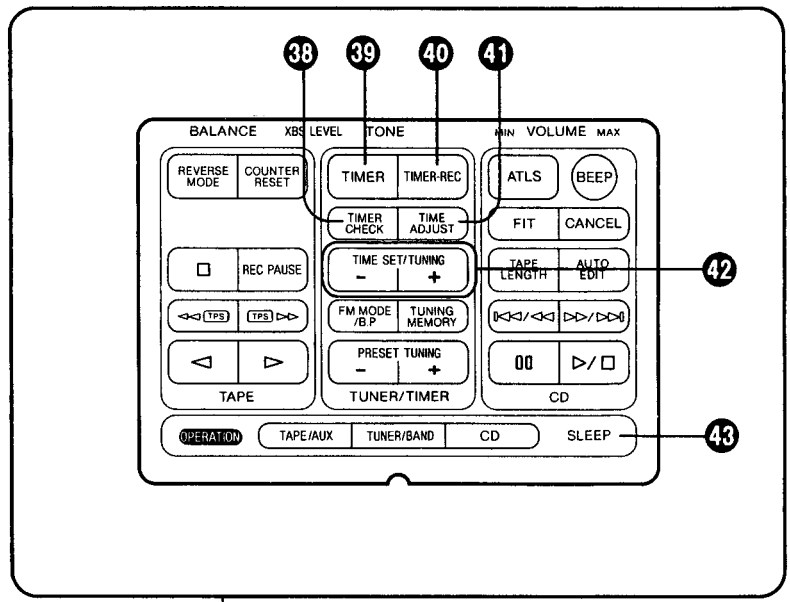


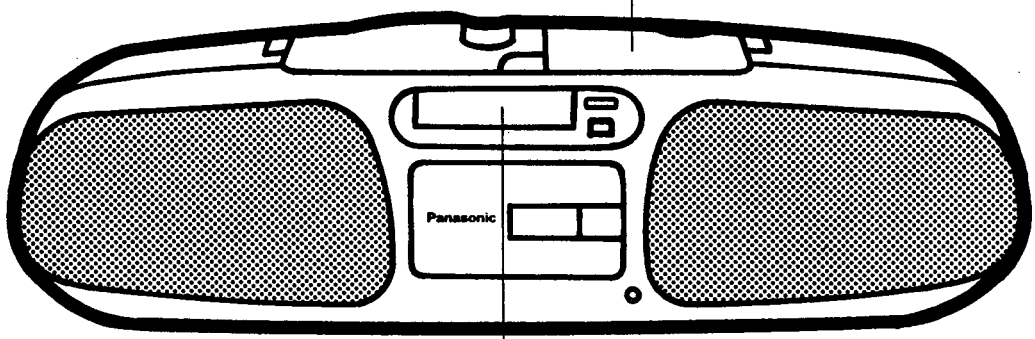
TIMER CONTROLS

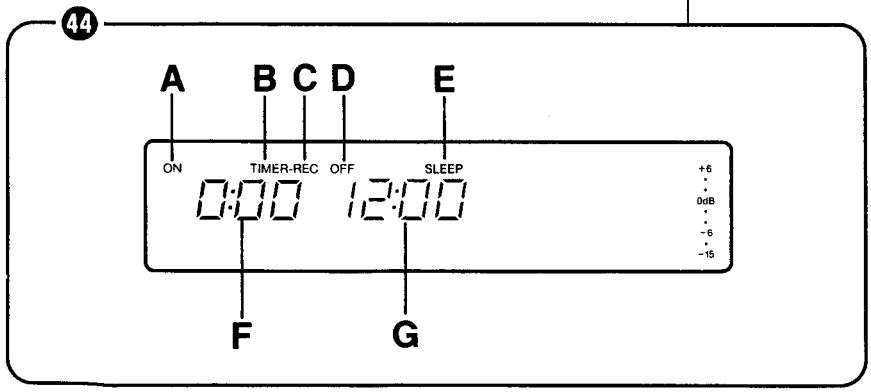
COMMANDES DE MINUTERIE

ZEITSCHALTUHR-BEDIENUNGSELEMENTE

COMANDI DEL TIMER





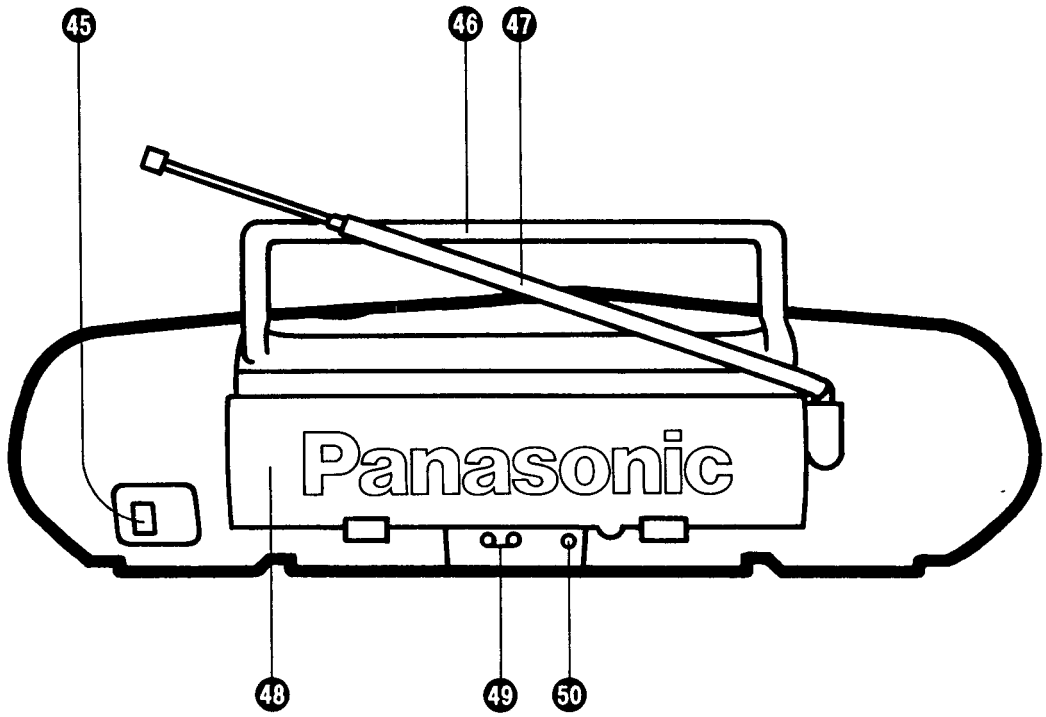


REAR PANEL

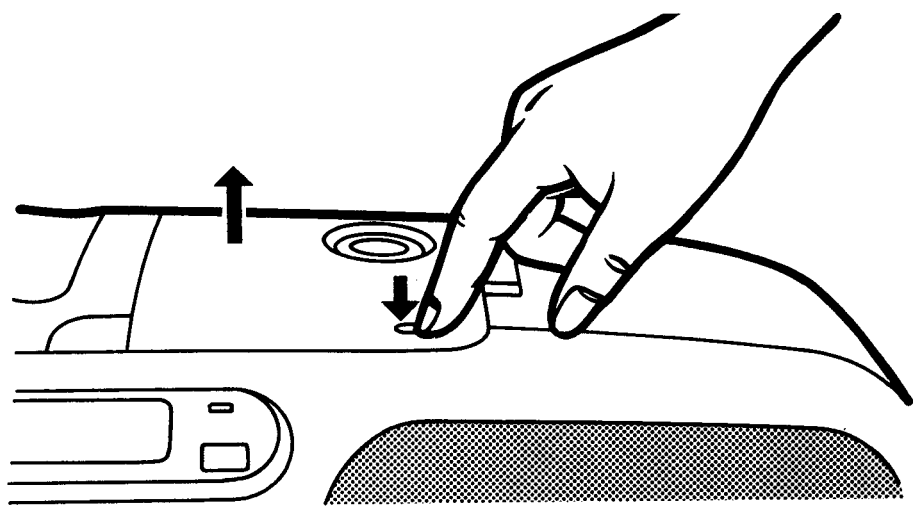
PANNEAU ARRIÈRE

RÜCKWARD

PANNELLO POSTERIORE



- To open the panel cover
- Ouvrir le volet du logement des panneaux
- Öffnen die Paneldeckel
- Aprire il coperchio della panelo.



LOCATION OF CONTROLS

CD/GENERAL CONTROLS

❶ **CD Eject Button (▲ CD EJECT)**

❷ **Operation/Battery Check/AC Connection Indicator (OPR-STDBY ⏻)**
The indicator lights green when unit is turned on. It functions as a battery check indicator when the unit is operated on batteries. When the AC power supply is used, it functions as an AC connection indicator. (The indicator colour changes to red when the unit is turned off.)

❸ **Remote Control Sensor**

❹ **Headphones Jack (PHONES)**

❺ **Balance Control (BALANCE)**

❻ **Extra Bass System Control (XBS LEVEL)**

❼ **Tone Control (TONE)**

❽ **Volume Control (VOLUME)**

❾ **Automatic Tape Level Setting Button (ATLS)**

❿ **Fit Edit Recording Button (FIT)**

⓫ **Tape Length Button (TAPE LENGTH)**

⓬ **Skip/Search Buttons (⏮/◁◁ • ▷▷/⏭)**

⓭ **Pause Button (▯▯)**

⓮ **Beep Sound Button (BEEP)**

⓯ **Cancel Button (CANCEL)**

⓰ **Auto Edit Recording Button (AUTO EDIT)**

⓱ **Play/Stop Button (▷/□)**

⓲ **Operation Switch (OPERATION)**
The operation can be turned on by pressing one of the Mode Select Buttons.

⓳ **CD Button (CD)**

⓴ **Display Section**
A: CD Mode Indicator (Cd)
B: Track Display
C: Playing Time Display
D: Level Meter
E: Program Indicator (PROGRAM)
F: Random Indicator (RANDOM)
G: Music Matrix
H: Over Mark Indicator (▷|)
I: Repeat Indicator (↻)

TUNER CONTROLS

㉑ **Tuning Buttons (TIME SET/TUNING)**

㉒ **Tuning Memory Button (TUNING MEMORY)**

㉓ **FM Mode/Beat Proof Button (FM MODE/B.P)**

㉔ **Tuner/Band Select Button (TUNER/BAND)**

㉕ **Preset Tuning Buttons (PRESET TUNING)**

㉖ **Display section**
A: Band Indicator (FM/MW/LW)
B: Frequency Display
C: Stereo Indicator (STEREO)
D: Tuning Indicator (TUNED)
E: Preset Channel Displays
F: Memory Indicator (PROGRAM)
G: FM Mode Indicator (MONO)
This indicator does not illuminate when the FM Mode Button is set to stereo position.

DECK CONTROLS

㉗ Cassette Compartment Cover

㉘ Eject Button (⏏ EJECT)

㉙ Reverse Mode Select Button (REVERSE MODE)

㉚ Counter Reset Button (COUNTER RESET)

㉛ Rec-pause Button (REC PAUSE)

㉜ Stop Button (□)

㉝ Fast/Tape Program Sensor Buttons (◁◁ TPS ▷▷)

㉞ Reverse-side Playback Button (◁)

㉟ Forward-side Playback Button (▷)

㊱ TAPE/AUX Button (TAPE/AUX)

㊲ Display section
- A: Tape Mode Indicator (TAPE)
- B: Tape Counter
- C: Running Indicator
- D: Reverse Mode Indicator (⇄)
- E: Tape Direction Indicators (◁◁ • ▷▷)

TIMER CONTROLS

㊳ Timer Check Button (TIMER CHECK)

㊴ Timer Play Button (TIMER)

㊵ Timer Recording Button (TIMER-REC)

㊶ Time Adjust Button (TIME ADJUST)

㊷ Time Set Buttons (TIME SET/TUNING)

㊸ Sleep Timer Button (SLEEP)

㊹ Display section
- A: Timer ON Indicator (ON)
- B: Timer Indicator (TIMER)
- C: Timer Recording Indicator (TIMER-REC)
- D: Timer OFF Indicator (OFF)
- E: Sleep Timer Indicator (SLEEP)
- F: Timer On Time/Play Mode Indicator
- G: Time Display

REAR PANEL SECTION

㊺ AC Socket (AC IN ~)

㊻ Handle

㊼ Telescopic Antenna

㊽ Battery Compartment Cover

㊾ AUX Input Jack (AUX IN)

㊿ Mixing Microphone Jack (MIX. MIC)

NOTES FOR CD OPERATION

■ Do not attempt to take this unit apart or attempt repairs yourself.

This unit is a very intricate device that uses a laser pickup to retrieve information from the surface of compact discs. The laser is carefully shielded so that its rays remain inside the cabinet. Therefore, never try to disassemble the player or alter any of its parts since you may be exposed to laser rays and dangerous voltages.

Laser products:
Wave Length—780 nm
Laser Power—No hazardous radiation is emitted with safety protection.

■ Close the disc holder cover when not in use.

There is a precision-made focusing lens in the disc holder. Always close the disc holder cover when not using the unit to protect this lens from dirt and dust. Also, never try to touch this lens.

■ The top and rear panels of the unit become warm while a disc is being played.

This is one way in which the unit dissipates heat and is not a malfunction.

■ Handle this unit with care when carrying or storing, do not subject it to any strong bumps or impacts.

Always remove the disc before storing the unit for any period of time.

■ Turn down the Volume Control.

Compact Discs have much less noise and a much wider dynamic range. Consequently, you may turn the volume up too high if you adjust it by trying to listen to surface noise as you might with a phonograph record. To prevent this problem, turn the volume down, raising it as desired only after the music has started playing.

■ Time displayed by this unit may differ slightly from the track times in the disc liner note.

The liner note included with each compact disc lists the playing times of each track. Since the times calculated by this unit include pause intervals, the displayed time may differ from the liner note time by this amount.

■ Do not place this unit near a tuner or television.

This unit uses high frequency signals and can cause interference with other radio and television reception. If this occurs, move this unit further away from the radio or television or change from an interior to an exterior television antenna.

CONCERNING COMPACT DISCS

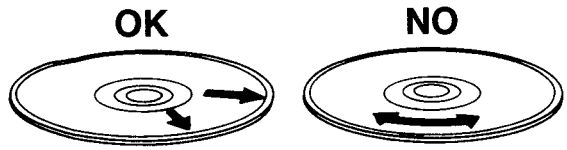
Observe the following precautions to enjoy the same outstanding performance from your compact discs for many years.

■ Handling precautions

Only compact discs having this mark can be used with this player.

COMPACT disc DIGITAL AUDIO

- Hold compact discs by the edges so the surface is not soiled with fingerprints.
- Be careful not to scratch the surface with fingernails or other sharp objects, particularly when inserting and removing discs from their cases.
- Do not bend the disc.
- Do not use record cleaning sprays or static electricity prevention liquids.
- Do not wipe with benzine, thinner or any other solvent. If the surface is soiled, wipe gently with a soft, damp (water only) cloth.
- When wiping discs, always move the cloth directly outward from the center of the disc, not in a circular motion as with standard phonogragh records.



(In Compact Discs, circular scratches along a line of pits are more likely to cause errors than straight scratches across many lines of pits.)

- If the disc is brought from a cold environment into a warm room, dew may form on the disc. Wipe this off with a soft, dry cloth before using the disc.
- Do not try to dry discs with a hair dryer.
- Do not write on the label side with a ball-point pen, hard pencil or other writing utensil.

■ Storage precautions

- Be sure to store discs in their cases to protect them from dust, scratches and warping.
- Do not place or store discs in the following places:

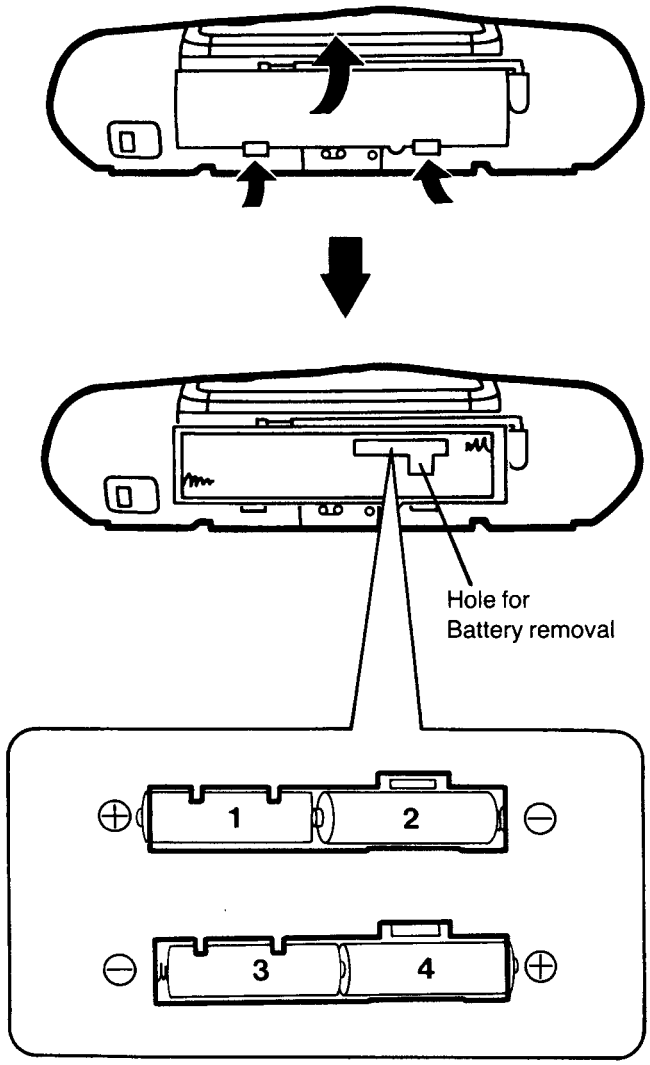
1. Locations exposed to direct sunlight.
2. Locations with high humidity or a lot of dust.
3. Locations directly exposed to a heat outlet or heating appliance.
4. In the glove compartment or rear ledge of an automobile.

INSTALLING THE DRY BATTERIES FOR MEMORY BACK-UP

Installing R6/LR6 dry batteries (Panasonic UM-3, or equivalent, not included) enables the programmed contents of the clock operations, broadcasting stations and CD play sequences to be retained.

■ Memory Back-up Batteries (4 R6/LR6)

1. Open the Battery Compartment cover.
2. Insert 4 R6/LR6 (Panasonic UM-3 or equivalent, not included) batteries into the Battery Compartment, making sure that the batteries are installed in the designated numerical order and that the proper polarities are maintained.



Program memory for the Tuner, CD, and Clock/Timer of this unit is retained by AC mains when operated on AC mains supply or by battery power when operated on batteries. In case the Memory Back-up Batteries are not used, power failure (when using AC mains) or the following operations cause the erasure of the memory:

- When using AC mains; unplugging the AC mains cord from the household AC mains outlet.
- When using battery power (R20/LR20); inserting the AC mains cord only into the AC Socket of this unit.

If one of the above cases occur, enter the program in memory again.

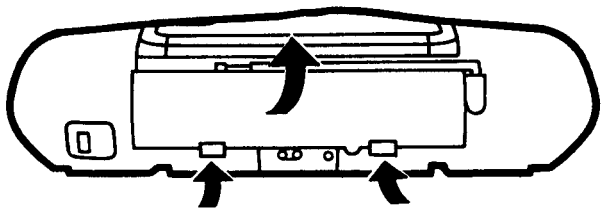
In order to avoid the accidental erasure of the program in memory, using the Memory Back-up Batteries is recommended.

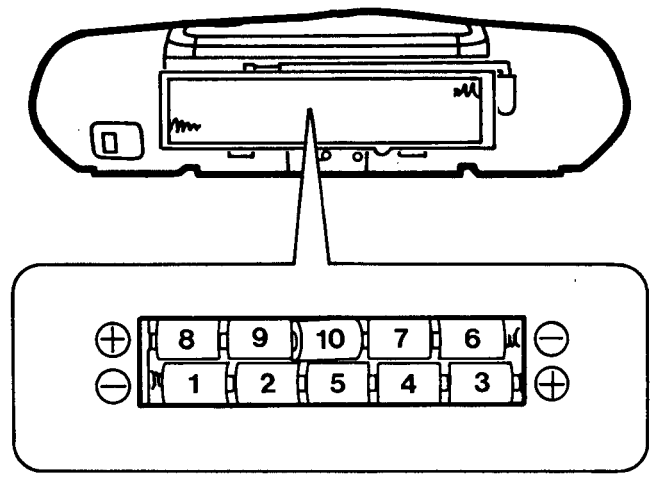
- The life of the Memory Back-up Batteries is about one year.
- While exchanging the Memory Back-up Batteries, be sure to connect the AC mains cord both to the unit and household AC mains outlet.

POWER SOURCE

■ Battery Operation (10 R20/LR20)

Insert 10 R20/LR20 (Panasonic UM-1 or equivalent, not included) batteries into the Battery Compartment, making sure that the batteries are installed in the designated numerical order and that the proper polarities are maintained.

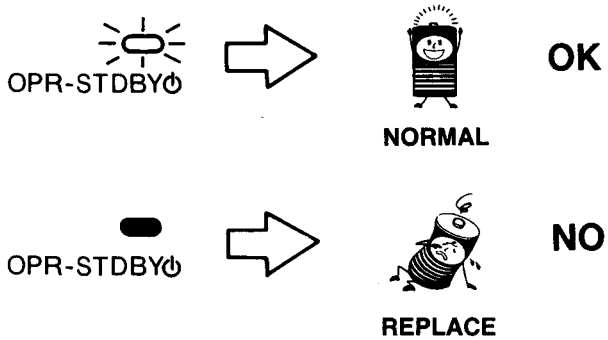




•Battery life

The amount of light provided by the Operation/Battery Check Indicator is a good indication as to how much longer the batteries can be used.

•Press the Operation Switch to turn on the unit.
When the Operation/Battery Check Indicator goes out or dims, replace all batteries with new ones.



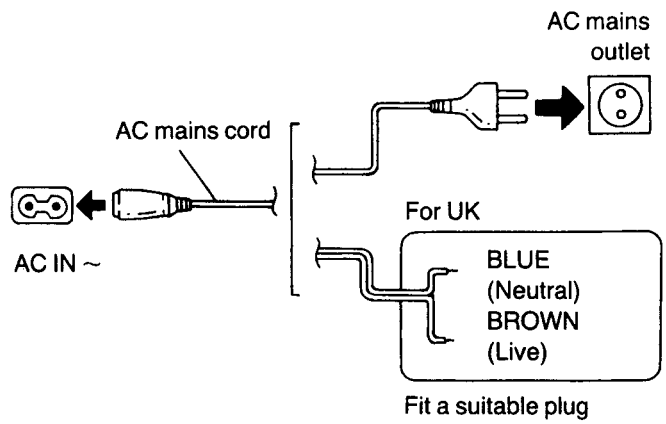
•Battery removal

Pull out the ⊕ side of the no. 3 and 8 of the batteries.

■ AC Power Operation

Connect the included AC mains cord to the AC Socket in the unit and your household AC mains outlet.

•The AC Connection Indicator will light during AC mains operation.



Note:
To operate on battery power, unplug the AC mains cord from the household AC mains outlet and the AC socket on the unit.

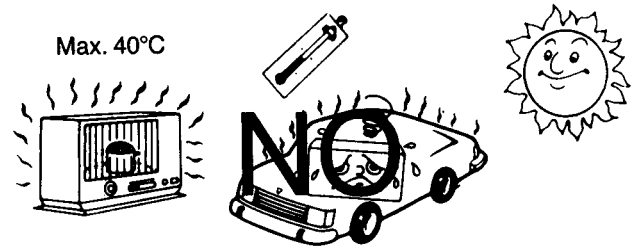
PRECAUTIONS

- **If the set is not used for a long period of time or is used only from an AC mains source, remove all the batteries to prevent potential damage due to possible battery leakage.**
- Avoid using or placing this unit near sources of heat. Do not leave it in an automobile exposed to direct sunlight for a long time with the doors and windows closed as this may deform the cabinet.
- Avoid cuts, scratches, or poor connections in the AC mains cord, as they may result in possible fire or electric shock hazard. Also, excessive bending, pulling or splicing of the cord should be avoided.
- Do not unplug the AC mains cord by pulling on the cord. To do so may cause premature failure or shock hazard.
- Do not operate the set on AC mains in a bathroom, as a potential shock hazard may result.

To Prevent Possible Damage to This Unit

- Load new batteries with their polarities (⊕ and ⊖) aligned correctly.
- Do not apply heat to batteries, or internal short-circuit may occur.
- If this unit is not to be used for a long period of time, or used on AC mains supply, remove all batteries and store them in a cool and dry place.
- Remove spent batteries immediately.
- Do not use old and new batteries together. Also never use an alkaline battery with a manganese battery.

- When not in use, disconnect the AC mains cord from the AC mains outlet.



Operation Switch (OPR-STDBY ⏻)

This switch switches ON and OFF the secondary circuit power only. The unit is in the "standby" condition when this switch is set to the OPR-STDBY ⏻ position. Regardless of the switch setting, the primary circuit is always "live" as long as the power cord is connected to an electrical outlet.

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

BASIC OPERATING PROCEDURE

■ Beep Sound Function

The beep sound (Pi) will be emitted each time the operation button is pressed. This is convenient for confirmation of the operations by remote control transmitter. Also, error beeps (PiPi) will be emitted when the wrong buttons are pressed. (For example, for CD play, when a nonexistent track is specified.)
The beep function can be turned on and off by pressing the Beep Button.

■ Direct Access Play Function

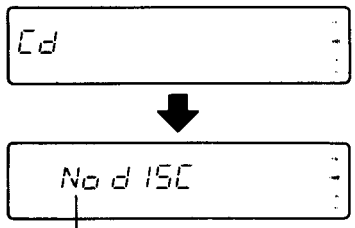
If, already the CD and/or cassette tape is loaded, the CD play or tape playback can be started by simply pressing the CD Play Button or tape Playback Button even if the unit is turned off.
Also radio reception can be turned on by pressing the "TUNER/BAND" Button.
(The operation is turned on and the appropriate sound source is selected automatically.)
(When using AC mains supply.)

■ Extra Bass System (XBS LEVEL)

When the Extra Bass System Control is adjusted, the dynamic level of the dynamic low frequency sound range is boosted.
Using this system with the Tone Control helps you to get more dynamic sounds.

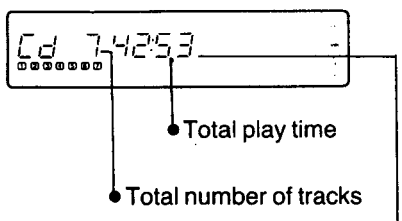
■ Playing a disc from beginning to end (Auto-Play)

1. Press the "CD" Button.
   (The unit is turned on, and CD Mode Indicator will appear on the display.)



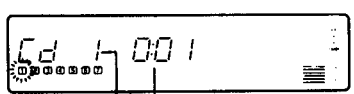
"No disc" is displayed if the disc has not been loaded.

2. Press the CD Eject Button and then insert the disc. (When the Disc Holder is closed, the disc rotates, and the total number of tracks and total playing time both appear on the Display Panel.)



- Total play time
- Total number of tracks
- When there are more than 13 tracks on the disc, the "▷" mark will be displayed.

3. Press the Play/Stop Button.
   - The disc will be played from the first track.
   - The number of the track being played will flash, and go out at the end of that track.



- Playing time per track
- Track number

4. Adjust the Volume, Balance, Tone and XBS Level Controls to the desired settings.

After use, be sure to press the Operation Switch to turn off the unit.

•Stopping disc play

Press the Play/Stop Button again. (The disc will automatically stop when all the tracks have been played through.)

•Stopping disc play at temporarily

Press the Pause Button during disc play. (The Time Display will start to flash.)

When the Pause Button is pressed again, disc play will resume from where it was previously stopped.

- Time Display flashes

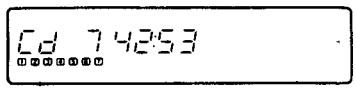
Note:

Always press the Play/Stop Button to stop rotating the disc before opening the Disc Compartment, to avoid possible damage to disc and/or the disc play mechanism.

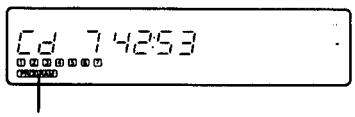
■ Playing specific tracks in a specific order (Program-Play)

Up to 36 tracks can be programmed.
Use the remote control unit for steps 2 and 3 below.

1. Follow steps 1 to 2 in "Playing a disc from beginning to end (Auto-Play)."

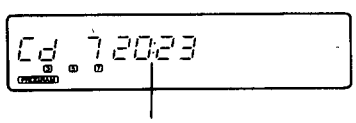


2. Press the Program Button on the remote control unit. (The Program Indicator appears on the Display Panel.)



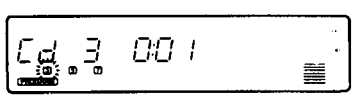
Program Indicator will appear.

3. Press the numeric keys on the remote control unit that correspond to the numbers of the tracks to be played in the play sequence.
   (When the numeric keys corresponding to each track number are pressed, the play sequence is first indicated and then when 2 seconds have elapsed, the whole play sequence is displayed.)



Total playing time for specified tracks

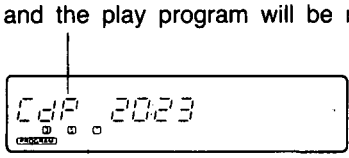
4. Press the Play/Stop Button.
   (Play now starts in the programmed sequence.)



5. Adjust the Volume, Balance, Tone and XBS Level Controls.

•Stopping programmed play

Press the Play/Stop Button again.
(Play will stop automatically when all the programmed tracks have been played through.)
(Play will stop and the play program will be retained.)



•Checking what has been programmed

The tracks which have been programmed and the play sequence can be checked when the Skip/Search Button is pressed in the stop mode.

•To program track no. 11 and following

First press the "+10" button and then one of the "1" to "10" buttons.
Track no. 16: +10→6
Track no. 20: +10→10
Track no. 28: +10→+10→8

Notes:

- "E" (error) appears on the Track Display when a nonexistent track is programmed.
- "F" (full) appears on the track display when tracks more than 36 have been programmed, to indicate that tracks more than 36 cannot be programmed.
- "--:--" appears on the Time Display when the total play time of the programmed tracks exceeds 100 min 0 sec, and the total time is not displayed.

■ Clearing a program

•Clearing all the programmed tracks (Cancelling the programmed play mode)

① Press the Program Button on the remote control unit in the stop mode. (The Program Indicator will start to flash on the display for about 5 seconds.)
② Press the Cancel Button while the indicator is flashing. (The Program Indicator goes out and the programming is cleared.)

•Clearing only the track programmed last

Press the Cancel Button in the stop mode.
(Each time the button is pressed, the track programmed last can be cleared in sequence.)
Example: When programs 3, 5 and 7 have been programmed, the tracks will be cleared in the sequence of 7, 5 and 3 each time the Cancel Button is pressed.

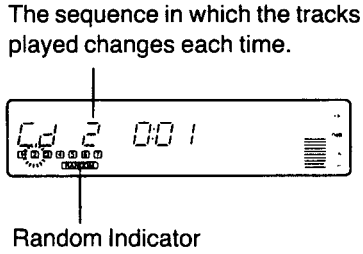
Note:

It is not possible to clear tracks located in the middle of a program (such as the third of 5 tracks).

■ Listening to tracks in any order (Random-Play)

The microcomputer inside the unit selects the tracks each time regardless of their sequence on the disc.
(The random play function is operated using the remote control unit. There is no corresponding control on the main unit.)

Press the Random Button in the stop mode.
(The Random Indicator on the display lights, and play now starts.)



•When all the tracks have been played through:
Play stops automatically.
•Clearing random play
Press the Random Button again. (The Random Indicator goes out.) It is also possible to clear random play by pressing the Play/Stop Button.

> **Note:**
> The random play function cannot be used in combination with the Program-Play function to play tracks.

■ Starting play from a specific track (Direct-Play)

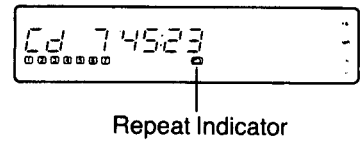
A disc can be played from a specific track to end track. (The direct play function is operated using the remote control unit.)
Press the "5" Numeric Button on the remote control unit to start play from track no. 5. (To listen to track no. 11 or above, use the "+10" and 1 to 10 buttons in combination.)

> **Note:**
> Direct play is not possible in the programmed play mode. (Tracks are added onto the programmed tracks.) Release the program mode function first and then proceed to operate.

■ Playing tracks on a disc again (Repeat-Play)

This function repeats the play of all the tracks.
In the programmed play mode, the tracks are played again in the programmed sequence.
In the random play mode, the tracks are selected each time and all the tracks are played again.

Press the Repeat button.
(The Repeat Indicator appears on the Display Panel.)



•Playing one track through again
First select the track with the programmed play function and press the Repeat Button.

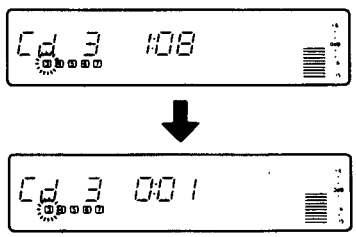
•Cancelling the repeat play function
Press the Repeat Button again.
(The Repeat Indicator goes out.)

■ Skip Play

By pressing the Skip/Search Button momentarily during disc play or when disc play is paused, you can easily move the pickup to the beginning of the track being played or a track before or after it.

•When you wish to listen from the beginning of the track being played...

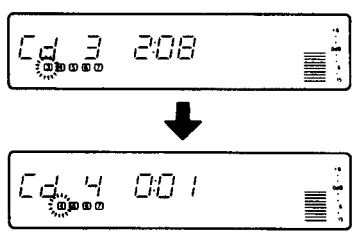
Press the ⏮/◁◁ Button once.



For example
If you press the ⏮/◁◁ Button while the track 3 is being played, the disc will be played from the beginning of the track 3.

•When you wish to skip the track being played and listen to the next track...

Press the ▷▷/⏭ Button once.



If you press the ▷▷/⏭ Button when the track 3 is being played, the disc will be played from the beginning of the track 4.

•Skipping to a track several tracks

Repeatedly press the Skip/Search Button. (Check the track number on the display.)
During programmed play, the tracks are skipped in the programmed sequence.
During random play, it is not possible to skip to the previous track with the ⏮/◁◁ Button.

■ Search Function

If the ▷▷/⏭ Button (or ⏮/◁◁ Button) is pressed and held during disc play, sound from the disc can be heard as the pickup moves at high speed in the forward (reverse) direction (the output level at this time is ¼ of the level during normal play). Release the button when the pickup reaches the desired portion of the disc.

Notes:
- During Program-play and Random play, you can only search the track being played.
- If you release the button immediately, the unit will go into the Skip play.

RADIO

The tuner can be used in the following ways:

[1] Manual Tuning
Use the Tuning Buttons to tune the radio to the desired broadcast frequency. The frequency changes up or down, each time the "+" or "−" button is operated, respectively. The increment of each step is determined by the band selected.

[2] Preset Tuning
You can memorize up to 30 radio stations (10 in FM; 10 in MW; 10 in LW), into the units preset memory.

[1] Manual Tuning

1. Press the "TUNER/BAND" Button.
   (The operation is turned on, and the tuning display mode will appear.)
2. Press the "TUNER/BAND" Button to select the desired radio band; FM, LW, MW.
   •The Band Indicator selected will be displayed.
3. Tune in your favorite station using the Tuning Button. Press "+" or "−" Tuning Button till the correct frequency and the Tuning Indicator illuminate.

Band	Tuning Step
FM	50 kHz
LW	9 kHz
MW	9 kHz

   For FM reception, press the FM Mode/Beat Proof Button to stereo position (the [MONO] Indicator does not appear). The FM Stereo Indicator will appear in the display when the FM stereo broadcast is being received. If FM stereo reception is poor (excessive noise, FM Stereo Indicator flickers), set the FM Mode/Beat Proof Button to the monaural position ([MONO] Indicator appears). This will reduce the noise and provide clear reception; however, the broadcast will not be heard in stereo.
4. Adjust the Volume, Balance, Tone and XBS Level Controls.

After use, be sure to press the Operation Switch to turn off the unit.

[2] Preset Tuning (From the Main Unit)

1. Tune to the desired broadcast using the Tuning Buttons.
2. Press the Tuning Memory Button.
   (The Program Indicator in the display will flash. If the Program Indicator stops flashing, repeat this step, otherwise, the broadcast frequency will not be stored in the next step.)
3. Press the Preset Tuning Buttons ("+" or "−") during the Program Indicator is flashing, and select the desired preset channel.
   +: The channel will change from 1–10.
   −: The channel will change from 10–1.
4. Press the Tuning Memory Button again.
   (The Program Indicator will stop flashing and the preset memory is completed.)
5. Repeat steps 1–4 to memorize a station in each of the remained preset channels.
   (When a new frequency is memorized in a channel, the frequency previously memorized in that channel will be cancelled.)

[2] Preset Tuning (From the Remote Control Transmitter)

1. Tune to the desired broadcast using the Tuning Buttons on the main unit.
2. Press the Program Button.
   (The Program Indicator in the display will flash. If the Program Indicator stops flashing, repeat this step, otherwise, the broadcast frequency will not be stored in the next step.)
3. Press one of the Numeric Buttons (1–10) while the Program Indicator is flashing.
   (The Program Indicator will stop flashing and the selected channel number will indicate in the display.)
4. Repeat the steps 1–3 to memorize a station in each of the remained preset channels.
   (When a new fequency is memorized in a channel, the frequency previously memorized in that channel will be cancelled.)

■ Antennas

FM:

Pull out the Telescopic Antenna and adjust its length and angle for optimum reception.

LW/MW:

The sensitive ferrite core antenna inside the set will provide excellent LW/MW reception in most areas. For optimum reception, turn the set in the direction which gives the best results since the ferrite core antenna is directional.

■ Memory Tuner Operation (From the Main Unit)

1. Press the "TUNER/BAND" Button to select the desired radio band.
2. Press the Preset Tuning Buttons ("+" or "−") to select the desired preset channel on the display.

■ Memory Tuner Operation (From the Remote Control Transmitter)

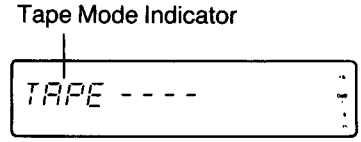
1. Press the "TUNER/BAND" Button to select the desired radio band.
2. Press the Numeric Button (1–10) to receive your desired radio station.

■ Most Recent Memory

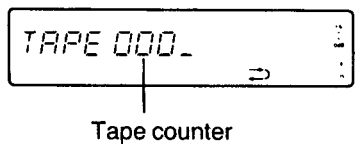
The most recent memory system "remembers" the broadcast station last tuned to when the radio is switched "OFF" or other functions are selected. The last tuned station will be heard when the unit is switched "ON" or the radio function is selected.

TAPE PLAYBACK

1. Press the "TAPE/AUX" Button.
   (The operation is turned on, and the tape mode indicator will appear.)

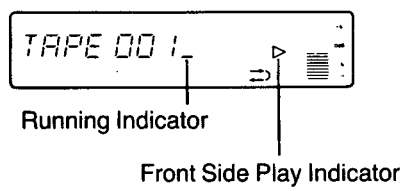


2. Press the Eject Button to insert the cassette tape.
   Insert the tape with the play side in front and the exposed tape section face down.



3. Press the Reverse Mode Select Button to select the desired reverse mode. (The modes are selected in turn each time the button is pressed. See page 23 for further details.)

4. Press the Playback Button.
   ▷: For playing back the front side
   ◁: For playing back the reverse side
   Press the Forward Side Playback Button to playback both sides.



5. Adjust the Volume, Balance, Tone and XBS Level Controls.

After use, be sure to press the Operation Switch to turn off the unit.

•Stopping the tape
Press the Stop Button on the deck.

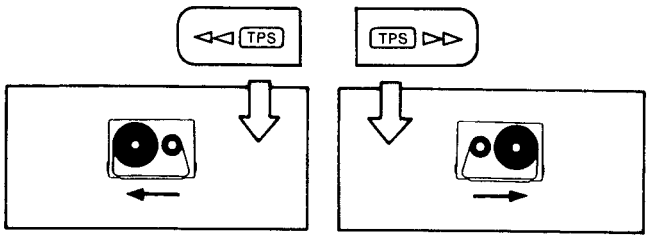
■ Using the Tape Counter

If you take a note of the tape counter display before recording, it will be easy to find the start of the program.

•While the reverse side of the tape is being played back (◁), the counter will count back. (000–999–998)...

■ Fast Forward and Rewind

The tape will rapidly advance in the forward or reverse direction when one of the Fast/Tape Program Sensor Buttons is pressed (during stop condition).



■ Full Auto-Stop

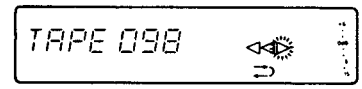
During playback, recording, fast forward, or rewind when the tape reaches its end, the tape movement will automatically stop. However, if the Reverse Mode Selector is set to " ⊂⇄⊃ " in playback condition, the Auto-Stop mechanism will not operate.

■ Program Search (TPS)

During playback, it is possible to skip to the track ahead or before the track which you are listening to and play back that track from the beginning.
(TPS: Tape Program Sensor)

■ Finding the start of the program now heard

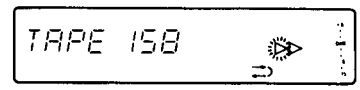
While the front side (▷) is being played, press the ◁◁ TPS button. (The tape is rewound to the start of the program now heard and the program is played back.)



■ Finding the start of the next program

While the front side (▷) is being played, press the TPS ▷▷ button. (Playback commences from the start of the next program.)

- When the reverse side of the tape is being played back, the TPS function operated in opposite direction.



Notes:
In the cases below the TPS may not function properly. This is to be expected and is not indicative of a breakdown.

- When the unrecorded blanks between the tape programs are less than 4 seconds long.
- When a tape recorded from a microphone is being played back (and there are no unrecorded blanks between the tape programs).
- When the programs have places where the sound has been recorded at a particularly low level or places where no sound has been recorded at all.
- When less than 10 seconds remain until the start of the present program or start of the next program.

AUTO REVERSE SYSTEM (DECK)

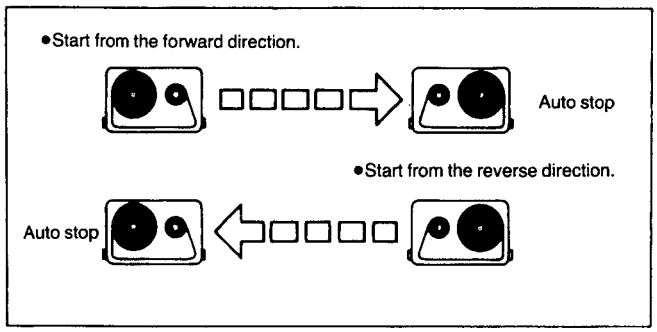
This unit is equipped with an auto reverse function that allows you to perform one-side playback/recording, two-side playback/recording or, repeat two-side playback.

- Tape direction can be reversed manually during playback by pressing the opposite direction of the Playback Button.

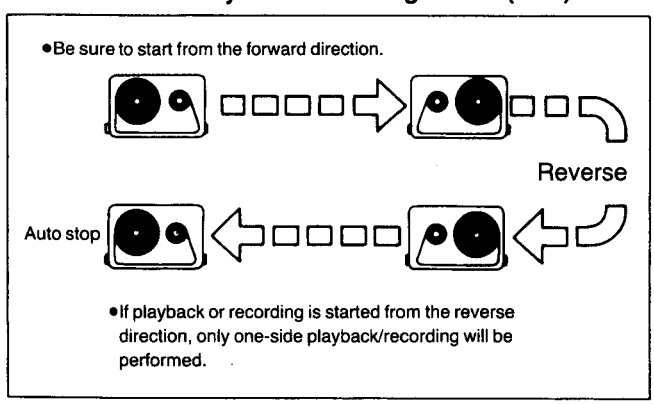
■ Reverse Mode Selector

The Reverse Mode Selector can be used to select any of 3 type modes.

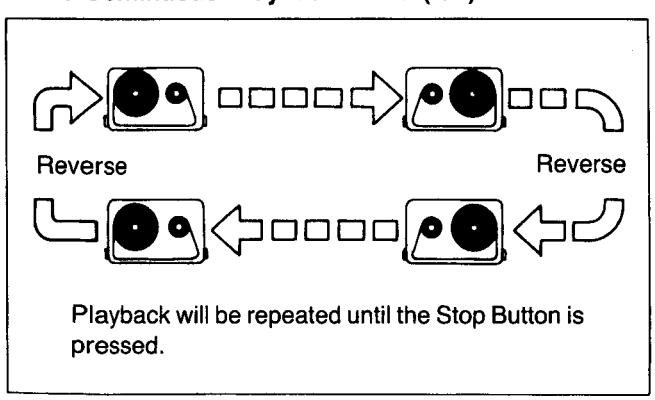
•Non-Reverse Playback/Recording Mode (⇄)



•Auto-Reverse Playback/Recording Mode (⇉)


•Be sure to start from the forward direction.
Reverse
Auto stop
•If playback or recording is started from the reverse direction, only one-side playback/recording will be performed.

•Auto-Continuous Playback Mode (↻)



- The Auto-continuous mode can be operated in playback only. When recording, this mode will function the same as the Auto-reverse mode.

Notes:

- A tape cannot be recorded on a side where record prevention tab has been broken. When performing two-side recording, be sure that the record prevention tabs for both sides of the tape are intact.
- When performing two-side recording, remember that if the cassette tape has a leader tape, recording will not be possible on that portion of the tape.
- The monitored sound will be temporarily interrupted during the operation of the auto-reverse function.

Your attention is drawn to the fact that recording prerecorded tapes or discs on other published or broadcast material may infringe copyright laws.

- This unit has an automatic level control that adjusts the record level automatically when recording from the radio, the external microphone or compact discs.
- An Automatic Tape Level Setting (ATLS) system is also provided for setting the record level when recording from compact discs.

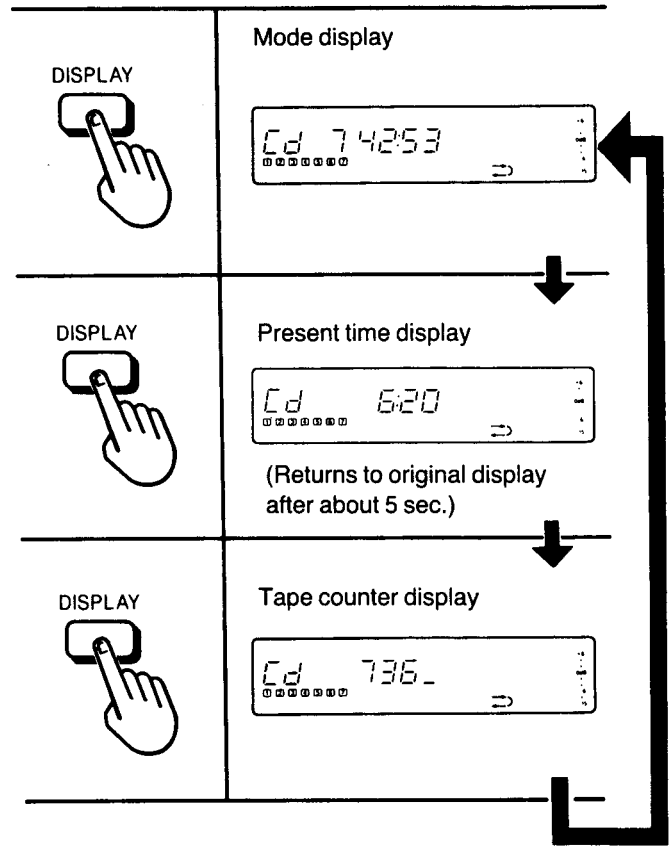
ATLS (Automatic Tape Level Setting) Recording

Since Compact Discs generally have a wide dynamic range, careful setting of the record level is required to achieve the best recording results.
When the ATLS Button is pressed in recording standby mode, this unit will automatically scan (fast search) the disc, set the appropriate recording level, and then start the recording.
- The ATLS Indicator will flash in fast search mode and will light in recording mode.
- During the fast search, ATLS recording will be released if the ATLS Button is pressed again.
- When disc play is cancelled during ATLS recording, the set level will be released.

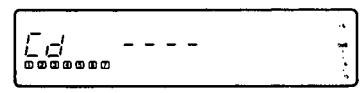
■ Selecting the Display

(Using the Remote Control Transmitter)
Every time the Display Button is pressed, the unit's display can be stepped through the mode displays, present time and tape counter display in sequence.
(This feature comes in handy during recording when making a note of the number on the tape counter or checking out the present time for recording a radio program.)

•When the "CD" Function Selector Button is used



Note:
The tape counter display is as follows when tapes have not been loaded.

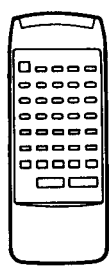


■ Recording from CD

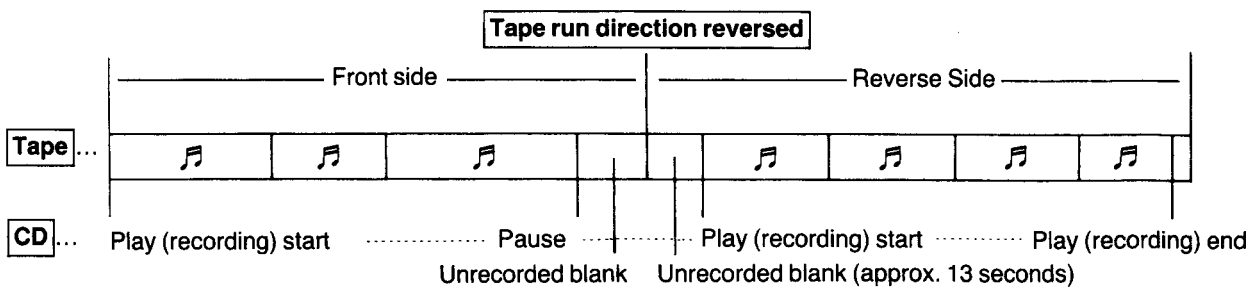
The CD edit recording function enables continuous CD recording without breaks in the tracks when the tape direction switches over from the front side to its reverse side.
CDs with up to 36 tracks can be recorded on this unit.

Function	Features	Recording
Auto edit recording AUTO EDIT	Depending on the length of the selected tape, the unit's microcomputer assigns the tracks for recording on tape sides 1 and 2 in the CD track sequence.	Recording in CD track sequence **SIDE A** 1 2 3 4 5 **SIDE B** 6 7 8 9 10
Fit edit recording FIT	This function is used when all the CD tracks cannot be recorded using the auto edit recording function. The microcomputer rearranges the track recording sequence & assigns the tracks for recording on tape sides 1 and 2 so that all the tracks can be recorded.	By rearranging track sequence microcomputer calculates whether all tracks can be recorded. **SIDE A** 1 2 4 7 8 **SIDE B** 3 5 6 9 10 11 12

•When the remote control unit is used

Manual edit recording 	The tracks to be recorded and the sequence in which they are to be recorded can be assigned by using the remote control unit's programmed play function.	The tracks to be recorded and their recording sequence can be assigned. **SIDE A** 2 5 7 11 **SIDE B** 6 10 12

•Sequence of operation

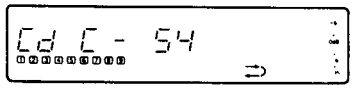


■ Recording all the CD tracks in sequence

(Auto edit recording)

- Before recording, check whether the tape's accidental erasure prevention tabs are intact and wind up the leader tape section.

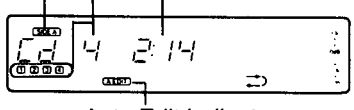
1. Press the CD Button, press the CD Eject Button to insert the CD, and press the Eject Button to insert the cassette tape.
2. Press the Tape Length Button to select the length of the recording tape. (Every time this button is pressed, the tape lengths are stepped through in sequence: C46→C54→C60→C90→C46...)



- When selecting a tape which length is not displayed by this unit:
  First, press the Tape Length Button and then select (adjust) the length in 1-minute in/decrease using the Skip/Search Button.

3. Press the Auto Edit button.
   (The Auto Edit Indicator lights, the tracks to be recorded are assigned to tape sides 1 and 2, and the contents are displayed for about 2 seconds.)

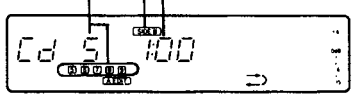
① 4 tracks recorded on side 1 (A), 2 min 14 sec remaining



Auto Edit Indicator

2 seconds later ⬇

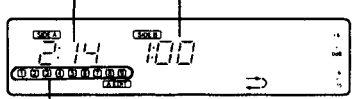
② 5 tracks recorded on side 2 (B), 1 min 0 sec remaining



2 seconds later ⬇

③ The tracks which can be recorded on tape sides 1 (A) and 2 (B) as well as the time remaining on both sides are indicated.

Time remaining on side 1 (A) | Time remaining on side 2 (B)

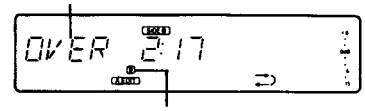


Tracks that can be recorded on both sides

- To make this display appear again, press the Auto Edit Button once more. (Every time it is pressed, the display will be stepped in sequence through ① tape side 1 (A), ② tape side 2 (B) and ③ simultaneous display.

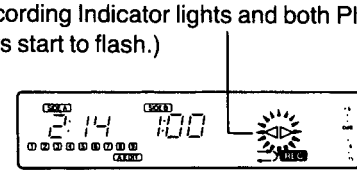
- If there are tracks which will not fit on side 2, the following display appears after display ② left:
  When this occurs: →Page 27.
- Recording can still be started, but the recording of track no. 9 will not be completed.

Over Time Indicator

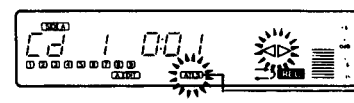


(The whole of track no. 9 cannot be recorded; an extra 2 min 17 sec are needed on side 2.)

4. Press the Recording Pause Button.
   (The Recording Indicator lights and both Playback Indicators start to flash.)

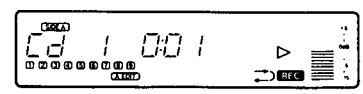


5. Press the ATLS Button for ATLS recording.
   (The recording level is set for each disc and recording commenced.)



Illuminate.

Press the Play/Stop Button in the CD section for automatic recording. (Recording begins.)



•Stopping recording

Press the Play/Stop Button in the CD section.
(The CD stops playing and the deck is set to the recording standby mode: CD synchro function.)
The tape stops when the deck's Stop Button is pressed but the CD will continue playing. (To stop both operations, press the Play/Stop Button in the CD section and the deck's Stop Button.)

•Clearing the CD auto/fit edit recording mode

Press the Cancel Button during stop condition.

•Number of CD tracks which can be edit-recorded

CDs with up to 36 tracks can be used.
("E" will appear on the display if the CD has 37 or more tracks, and the edit recording function cannot be used. To record a CD with 37 or more tracks, use the Manual edit recording function to program and record a maximum of 36 tracks.)

Notes:

- Be sure to set the Reverse Mode Select Button to "⇄".
- During recording with the edit recording function, none of the function buttons can be operated except the Play/Stop Button in the CD section. ("E" display appears.)
- It is not possible to play a CD only using the CD edit recording function. ("E" display appears.)

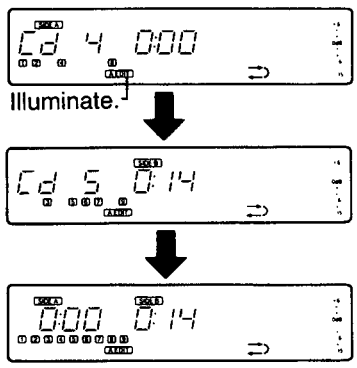
■ When the Over Time Display appears during CD auto edit recording (fit edit recording)

•When recording all the tracks even by going to the extent of rearranging their sequence:

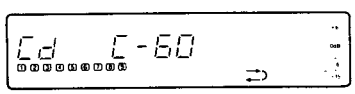
① **Press the Fit Button.**
(As with auto edit recording, the tracks that can be recorded on tape sides 1 (A) and 2 (B) as well as the time remaining are displayed.)

② Press the Recording Pause Button.

③ •Press the ATLS Button for ATLS recording.
•Press the Play/Stop Button in the CD section for automatic recording.



•When recording the tracks in their original sequence or when the Over Time display appears even after the Fit Button has been pressed:
Use a longer tape. Then proceed again from step 2 in the auto edit recording operation.



•When the Over Time display is 1 to 15 seconds
Since the time for recording on tape is slightly longer than that indicated on the tape, it may still be possible to record all the tracks.

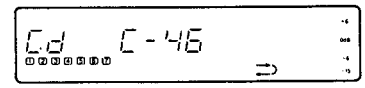
•To check the play sequence
Each time the Skip/Search Button is pressed in the stop mode, the play sequence can be checked on the display.

•When recording a CD without using the edit recording function
Proceed with steps 1, 4 and 5 for the auto edit recording operation. (The programmed play function can also be used.)
(At this time " ⇄ , ⇉ " can be selected by the Reverse Mode Selector Button.)
Do not use the CD search play function during recording. (The garbled sound made during searching will be recorded instead.)

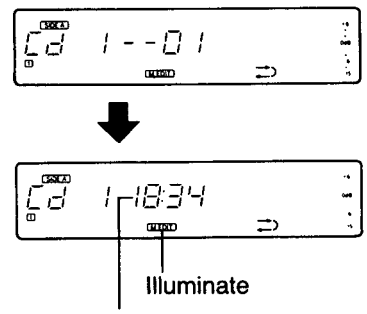
> **Note:**
> For fit edit recording, always remember to use a tape which is longer than the total playing time of the CD. (If a tape with a shorter time is loaded, the "E" display appears even when the Fit Button is pressed, and fit edit recording cannot proceed.)

■ When assigning the tracks to be recorded and their sequence (Manual edit recording)

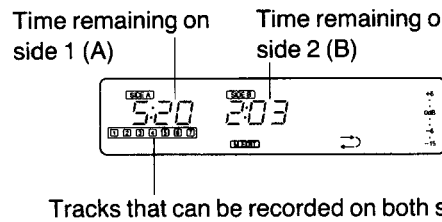
1. Proceed with steps 1 and 2 for auto edit recording.



2. Press the Manual Edit Recording Button on the remote control unit, and assign the track numbers to be recorded in sequence using the numeric buttons. (Up to 36 tracks can be programmed.)



3. Press the Auto Edit Button.
(The Auto Edit Indicator illuminate, the tracks to be recorded on tape sides 1 (A) and 2 (B) are assigned, and each programmed track is displayed for 2 seconds at a time.)



4. Press the Recording Pause Button.
•Press the ATLS Button for ATLS recording.
•Press the Play/Stop Button in the CD section for automatice recording.
(Recording begins in the selected sequence.)

•Clearing the selected tracks or changing their sequence (during stop condition)

① Press the Manual Edit Button on the remote control unit. The Manual Edit Recording Indicator flashes for about 5 seconds.

② Press the Cancel Button while the indicator is flashing.

③ To change the track sequence, proceed again from step 2 above (Manual edit recording).

- Press the Rec-pause Button.
- Press the ATLS Button for ATLS recording or press the Play/Stop Button in the CD section for recording automatically.

Recording begins in the selected sequence.

■ Recording Radio Broadcasts

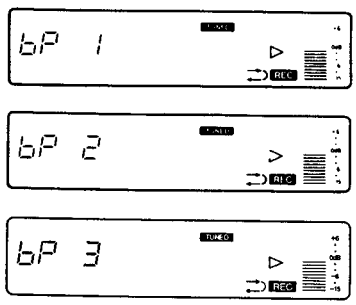
1. Follow the procedure described in "RADIO".
2. Insert the cassette tape into the cassette compartment.
3. Select the desired reverse mode using the Reverse Mode Selector Button.
   ⇄ : Non-reverse mode
   ⇉ : Auto reverse mode
4. Press the Recording Pause Button.
   (The Recording indicator appears, and the Playback Indicator starts to flash.)
5. Press the Playback Button (for the front or reverse side).
   (Recording now begins.)
6. Press the Stop Button to stop the recording.

•Stopping the recording temporarily

Press the Recording Pause Button again. (The deck is set to the recording standby mode.)

•How to use the Beat Proof Button

When an MW/LW broadcast is recorded, the Beat Proof Button can be used to reduce unwanted "beat" signals (whistle) which are sometimes present. Press the button to whichever position (MW: bp 1 or bp 2/LW: bp 1, bp 2 or bp 3) best reduces these "beat" signals.



■ Recording through External Microphone

1. Connect the external microphone (not included) to the Mixing Microphone Jack.
2. Press the "TAPE/AUX" Button.
3. Follow the procedure described in steps 2–6 of "Recording Radio Broadcasts".

■ Monitoring

The monitor system enables you to listen, through the speakers or headphones, to the sound as it is being recorded.

If it is necessary to adjust the volume level of the sound being monitored, do so by using the Volume Control.

Adjusting the Volume Control will not affect the Automatic Level Control record level settings.

■ Erasure of Recordings

When recording, previously recorded signals on the tape will be erased automatically.

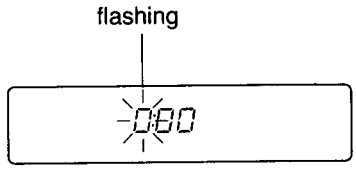
To erase a tape without re-recording, use the following procedure. (Make no connections to the Mixing Microphone Jack and AUX IN Input Jacks.)

1. Press the TAPE/AUX Button.
2. Press the Rec-pause Button, and Playback Button.

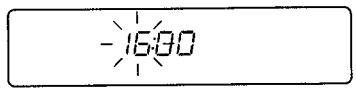
■ To set the correct time (Ex. PM 4:20)

[1] "Hour" setting

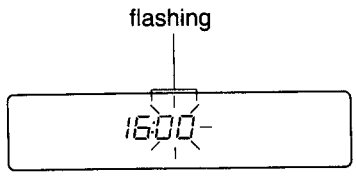
1. Press the Time Adjust Button.
   •The Hour Display will begin to flash.



2. Press and hold the Time Set Buttons ("+" or "−") until the correct hour appears on the Clock Display.



3. Press the Time Adjust Button.
   •The hour display will stop flashing, and then minute display will begin to flash.



[2] "Minute" setting

1. Press and hold the Time Set Buttons ("+" or "−") until the correct minute appears on the Clock Display.

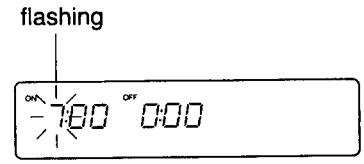
2. Press the Time Adjust Button.
   •The minute display will stop flashing.

- •To increase or decrease the displayed time hour by hour (minute by minute), press the Time Set Button repeatedly.
- •Note that the minute "00" display appears following "59", but the hour display is not changed.
- •When the minute display is set correctly and the Adjust Button is pressed, the clock is reset to "0" second.

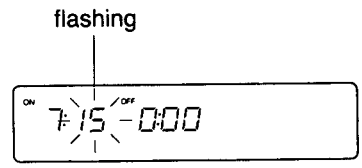
■ Setting the time on the timer

1. Press the Timer Check Button.
   (The display will return to what was previously indicated if 10 or more seconds are allowed to elapse before the next operation is accomplished.)

2. Press the Time Adjust Button, and then press the Time Set Buttons ("+" or "−") to set the hour display.

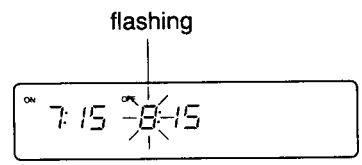


3. Press the Time Adjust Button and the Time Set Buttons ("+" or "−") to set the minute display.

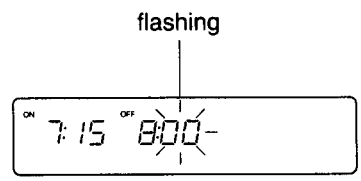


4. Press the Time Adjust Button.

5. Press the Time Set Button ("+" or "−") to set the hour display.



6. Press the Time Adjust Button and the Time Set Button ("+" or "−") to set the minute display.



7. Press the Time Adjust Button.
   •The display will change to the previous display.

•Checking the time settings

Press the Timer Check Button.
[When this button is pressed again in the timer set mode (while the Timer Indicator is still on), the programmed play mode (CD, tape, radio, etc.) can be checked.]

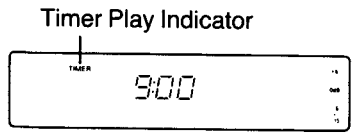
•Changing the time settings

Changing only the timer ON time: First proceed with steps 1 to 3 and then press the Timer Check Button.
Changing only the timer OFF time: First press the Timer Check Button and the Time Adjust Button twice, and then proceed with steps 4 to 7.

■ Timer Play

First check the present time.

1. Set the time on the timer. (See page 29.)
2. Select the sound sources to be played by the timer using the Mode Select Buttons and get the respective players ready for play.
3. Adjust the play volume using the Volume Control, and press the Timer Play Button.
   (The Timer Play Indicator appears on the display.)
   In each case, play will commence at the set time.

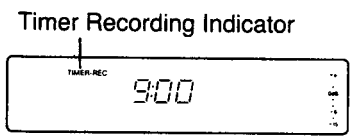


- To switch off the operation, press the Timer Play Button to goes out the Timer Play Indicator and then press the Operation Switch.
- To play a CD using the timer, do not open the disc holder if tracks have already been programmed. (This will clear the programming and play will start from the first track.)
- In the timer setting mode (the Timer Play Indicator is on), it is not possible to switch on the operation even by pressing the Operation Switch. (In this case, release the timer mode by pressing the Timer Play Button.)

■ Timer Recording

First check the present time.

1. Set the time on the timer. (See page 29.)
2. Select the "TUNER/BAND" Button and tune in the station which broadcast is to be recorded, and then insert the cassette tape.
3. Press the Timer Recording Button (the Timer Recording Indicator lights).
   Timer recording will start at the set time.



- To switch off the operation, first, press the Stop Button in the deck section, and then, press the Timer Recording Button. (Upon completion of the recording, press the Timer Recording Button to turn off the Timer Recording Indicator in order to avoid making an operational error.)

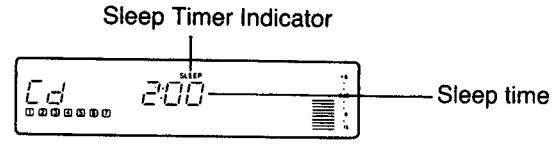
■ Operation as a Go-To-Sleep

You can set this unit to play up to 120 minutes, then turn off automatically.

•CD sleep timer operation

The same operation can be performed using tape or radio. (Press the "TAPE/AUX" Button or "TUNER/BAND" Button.)

1. Press the "CD" Button.
2. Press the Sleep Timer Button. While the sleep time is displayed, it can be adjusted, up or down, using the Time Set Buttons.



- Release the Time Set Buttons when the desired sleep time is displayed.

3. Press the Play/Stop Button of the CD.

- To confirm the remaining time, press the Sleep Timer Button.
- To cancel the Go-To-Sleep operation, press the Operation Switch.
- The sleep time set by the step 2 above is retained in memory. If you want to operate the unit on the same sleep time, only press the Sleep Timer Button.

•To change the remaining sleep time

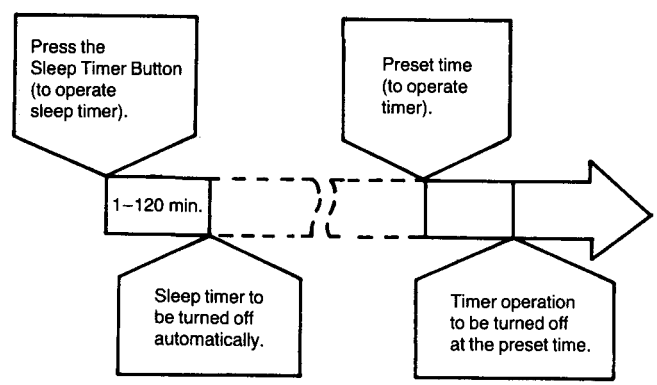
Press the Time Set Buttons ("+" or "−") after pressing the Sleep Timer Button.
When the sleep operation is performed again, the sleep time originally set will be displayed.

•To change a sleep time which has already been set

① Press the Operation Switch to switch off the operation, and then switch it back on again.
② Press the Sleep Timer Button and set the sleep time using the Time Set Buttons.

■ Combined Operation, Go-To-Sleep Radio and Wake-up Radio Alarm

1. Follow the procedure described in steps 1–3 of "Timer play".
2. Press the Sleep Timer Button.


Press the Sleep Timer Button (to operate sleep timer).
Preset time (to operate timer).
1–120 min.
Sleep timer to be turned off automatically.
Timer operation to be turned off at the preset time.

MIC MIXING

Mixing is the combination of a voice or instrumental sound (through a microphone connected to the Mixing Microphone Jack) and the sound from a CD, tape, a radio broadcast or an equipment connected to the AUX IN Input Jacks.

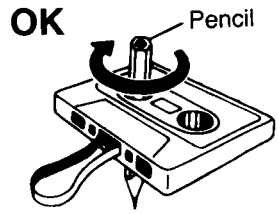
1. Connect the Mixing Microphone to the Mixing Microphone Jack.
2. Set the unit to playback mode.
   In mic mixing with the sound on equipment connected to the AUX IN Input Jacks, press the TAPE/AUX Button. When not in mixing mode, unplug the microphone.

Notes:
- When not in mic mixing mode, unplug the microphone.
- If a mixing microphone is placed too close to the speakers, feedback (howling) may be heard. If so, place the microphone as far away from the speakers as possible, or turn down the volume.

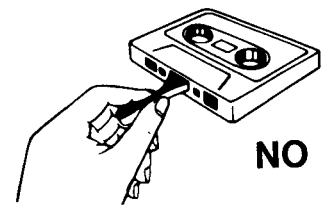
CASSETTE TAPES

Use only good quality type tapes up to the length of C-90. Do not use C-120 tapes with this unit because these tapes can easily become broken or stretched if not used with extreme care and may get tangled with the Capstans and Pressure Rollers.

If the tape loosens, take up the slack by turning the reel in the proper directions.



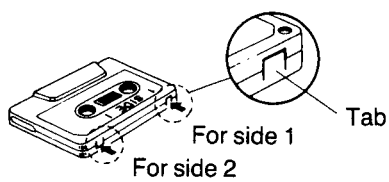
Do not handle, or pull the tape out of the cassette.

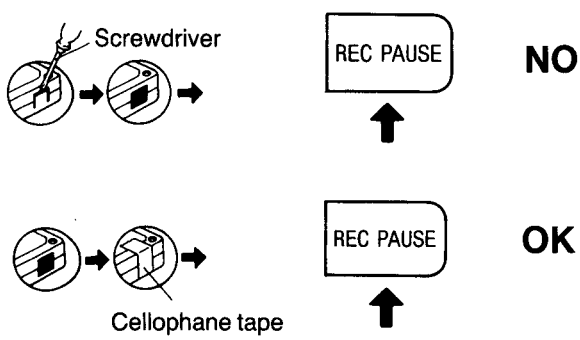


Notes:
- Use normal type of cassette tapes only. If other tape is used, you may not obtain optimum performance.
- Cassettes, both recorded and unrecorded, should not be stored in locations with high temperature, high humidity or direct sunlight. Never place a recorded cassette near a magnetic source, such as a magnet or a TV set as this may affect tape performance.

RECORD PREVENTION TABS

Cassettes are provided with plastic tabs (as illustrated) to prevent accidental erasing of a recording.
Recordings can be made only when the tab is intact. There is one tab for each side (track) of the tape. To preserve a valuable recording, the tab(s) should be broken off with a small screwdriver.
If you want to record on a track which tab has already been broken off, use cellophane tape to cover the hole, and record.





If, when recording, one of the tape's accidental erasure prevention tab is broken out:
When the Recording Pause Button is pressed, the Recording Indicator and Front and Reverse Side Play Indicators will start flashing on the display as usual, but if one of the tape's tab has been broken out, the Playback Indicator corresponding to the side with the missing tab will not start flashing.

■ Operations

The following operations can be performed using the remote control unit.
They are identical to the operations performed using the main unit controls.

•Operation Switch
Operation OFF when the unit is powered by dry batteries.
Operation ON/OFF when the unit is powered by an AC mains supply.
The "OFF" position as same function as "OPR-STDBY⏻" position on the main unit.

•CD operation
Selection of CD mode, sequential play, programmed play, direct play, random play, repeat play, skip play, search play, program clear, pause and stop, CD editing functions, CD editing cancelling.

•Radio operations
Selection of tuner mode, band switching, preset tuning.

•Tape operation
Fast forward, rewind, TPS, recording pause, recording, stop, playback.

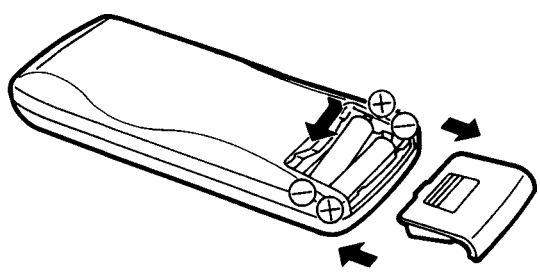
•Others
Sleep ON/OFF, display selection.

•Volume control
Volume up/down.

When operating the unit using the remote controller, press the buttons on the remote controller slowly and accurately.

■ Inserting the Remote Controller batteries

1. Open the cover of the battery case.
2. Insert the batteries.
   Batteries used: Two R03/LR03 (Panasonic UM-4 or equivalent, not included).



Insert the batteries in the correct polarity (⊕ ⊖).

■ Replacement interval of Remote Controller batteries

Although the life of the batteries will vary depending upon the number of times that the Remote Controller is used, the average life based on the used of the batteries is about 1 year.

If the Remote Controller fails to operate when it is held near the unit, replace the batteries with new batteries, even if one year has not elapsed.

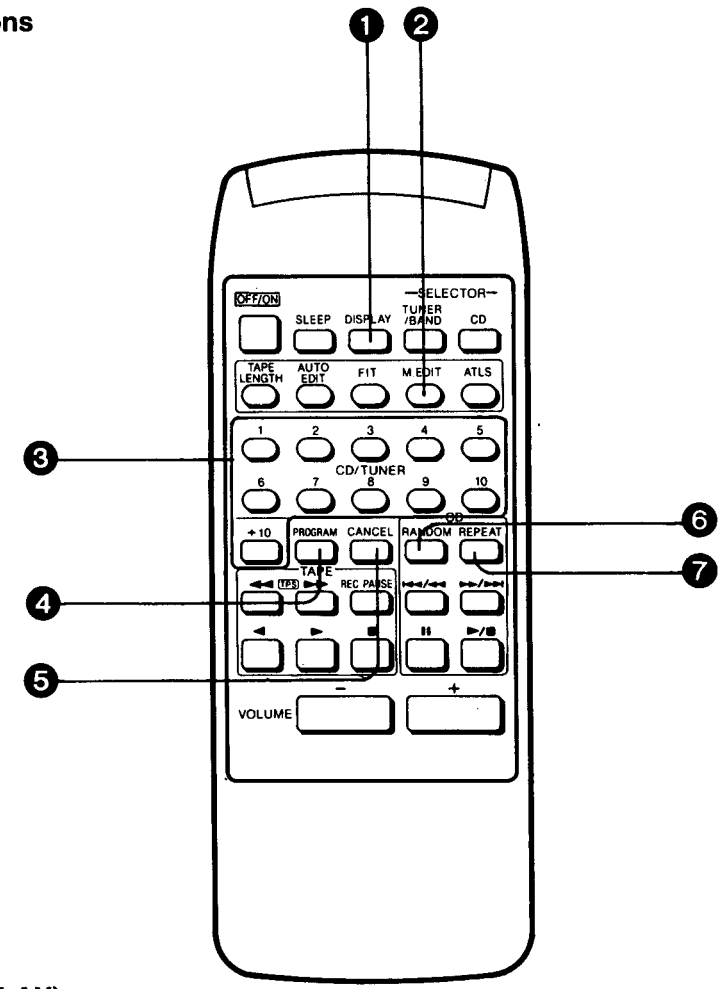
Precautions for using the Remote Controller

- If the unit is exposed to direct sunlight, the Remote Controller may sometimes fail to function. Be sure, therefore, to keep the unit out of direct sunlight. In such case, the maximum range of the Remote Controller (approx. 7 m) may sometimes be reduced.
- If strong light falls on the Remote Control sensor of the unit (e.g. high frequency type fluorescent lamp), the signals from the Remote Controller may fail to be received by the unit. In such case, take steps to prevent strong light from falling onto the unit.
- If there is an obstacle between the Remote Controller and the unit, the signals from the Remote Controller will be blocked off, preventing the unit from operating.
  Use the Remote Controller in a position directly in front of the unit so that the Remote Control Sensor can be seen.
- Even if the Remote Controller is not aimed at the unit, the unit may sometimes operate when a button on the Remote Controller is pressed. This is caused by the infra-red beam being reflected off a wall, ceiling, floor, or furniture, and striking the Remote Control Sensor of the unit.

- Do not operate the Remote Controller of this unit near a unit which is designed to operate using a different remote controller.
- Do not simultaneously use this Remote Controller and one or more remote controllers intended either for the same type of unit or for another type of unit, such as a television set.
- If you operate the Remote Controller near the unit when listening to an MW or LW broadcast, noise may be heard. In such a case, hold the Remote Controller at a sufficient distance from the unit so that noise is not heard.
- Do not disassemble the Remote Controller or touch any of the components inside it.
  Do not place a heavy object on the Remote Controller or leave it exposed to direct sunlight or in a hot location.
- Do not spill liquids on the Remote Controller. This may cause damage to the controller.

- The receiving angle is approx. 60° (30° in each of the left, right, up, and down directions).
- The maximum usable distance in about 7 m when the Remote Controller is aimed directly at the Remote Control Sensor.

■ Controls and Functions



❶ Display Button (DISPLAY)

Press this button when you wish to confirm the present time while listening to CD, radio and tape.

❷ Manual Edit Recording Button (M.EDIT)

Press this button when recording desired tracks in a selected sequence.

❸ Numeric Buttons (1–10, +10)

These buttons are used to specify the CD's track (1–10, +10), and select the preset channel of the tuner (1–10).

❹ Program Button (PROGRAM)

Press this button for CD program-play and for preset memory of the tuner.

❺ Cancel Button (CANCEL)

Press this button to cancel the program.

❻ Random Button (RANDOM)

Press this button to let the microcomputer make a random selection of the sequence.
The random indicator will illuminate.

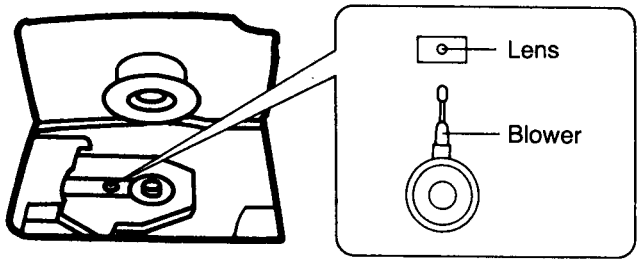
❼ Repeat button (REPEAT)

Press this button to activate the repeat mode. The Repeat Indicator will appear.

Note:
Please refer to "LOCATION OF CONTROLS" for the controls not described above.

■ Cleaning of Lens

Open the Disc Holder and clean the lens as shown.



•If the lens is extremely dirty, clean it with a cotton swab.

ABOUT DEW

Dew is often seen as water built-up on the inside of the windows in a warm room on a cold winter day. Dew can also form inside this unit in a similar manner in the following cases:

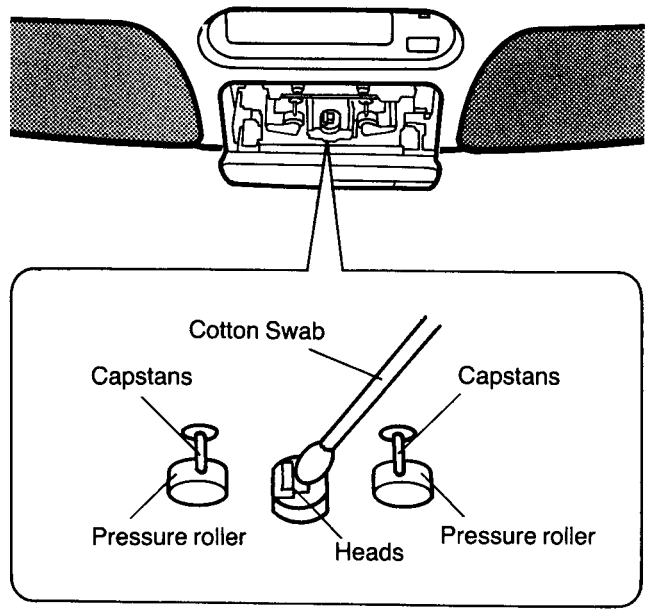
- •Immediately after a heater has been turned on.
- •In a steamy or very humid room.
- •When the unit is suddenly moved from a cold environment to a warm place.

If dew forms inside this unit, it may not operate properly. To correct this problem, turn on the operation and wait about 1 hour for the dew to go away.

■ Cleaning of Tape Heads

The head assembly, Capstans, and Pressure Rollers are in constant contact with the tape. If these parts are dirty, the sound quality will be impaired. Get into the habit of cleaning the parts regularly (after every 10 hours or so of use) in accordance with the procedure outlined below.

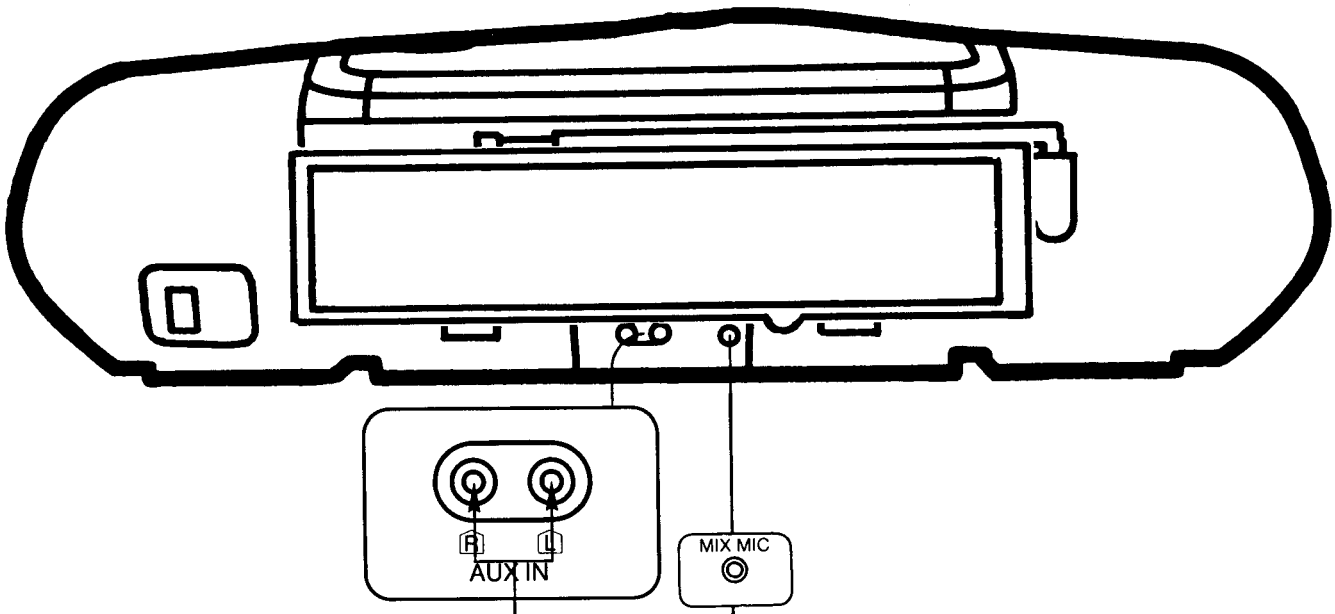
1. Open the Cassette Compartment Covers by pressing the Eject Buttons.
2. Clean them with a cotton swab.



Notes:

- •If the heads are extremely dirty, clean them with a cotton swab dampened with a little alcohol.
- •Do not bring any type of metal objects or tools such as magnetic screwdrivers in contact with the head assembly.
- •Do not clean the plastic cabinet with benzine or thinner. Clean it with a solution of soap and water.
- •Avoid spray-type insecticides. Some insecticides contain chemicals that could cause cabinet deformation.

CONNECTIONS

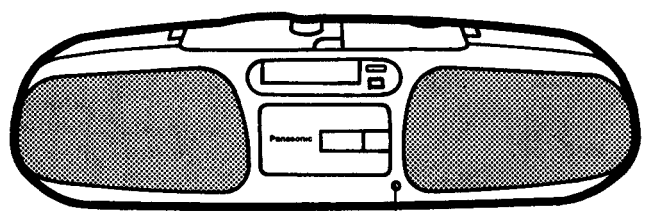


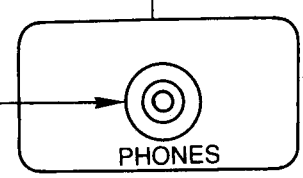
•To connect the other equipment.
(Press the "TAPE/AUX" Button to select the "AUX" mode.)

Tape Deck

External Microphone
(optional)
[M3 Type (Mini) Jack]

Headphones
(EAH-S20, optional)





[M3 Type (Mini) Jack]

- When using the headphones, avoid listening to sound at excessive volume levels, because it may injure your ears.
- Speakers are automatically cut off when the headphones are connected.

- Eviter d'utiliser le casque d'écoute à un niveau sonore tel qu'il soit préjudiciable pour les oreilles.
- Le fait de brancher la fiche du casque a pour résultat automatique de déconnecter les haut-parleurs.

- Nicht bei zu hoher Lautstärke mit dem Kopfhörer hören, da dies Gehörschäden verursachen kann.
- Beim Anschluß eines Kopfhörers werden die Lautsprecher automatisch abgeschaltet.

- Usando la cuffia, evitare di ascoltare il suono a livelli eccessivi di volume, perché si potrebbe danneggiare l'udito.
- Gli altoparlanti si escludono automaticamente quando si collega la cuffia.

SPECIFICATIONS

■ Radio

Frequency Range:	FM; 87.5–108 MHz LW; 144–288 kHz MW; 522–1611 kHz

■ Disc Player

Sampling Frequency:	44.1 kHz
D-A Conversion:	16-bit linear
Beam Source:	Semiconductor laser (wavelength 780 nm)
No.of Channels:	2-channels, stereo

■ Tape Recorder

Track System:	4-track, 2-channel, stereo
Recording System:	AC bias
Erasing System:	AC erase
Monitor System:	Variable sound monitor
Frequency Response:	30–16000 Hz

■ General

Power Requirement:	AC; 230–240 V, 50 Hz Power consumption; 46 W Battery; 15 V (10 R20/LR20, UM-1 batteries) Memory Back-up for Computer/ Clock; 6 V (4 R6/LR6, UM-3 batteries)
Power Output:	22.5 W×2...PMPO
Speakers:	10 cm×2 (Woofer) 2 cm×2 (Tweeter)
Jacks:	
Input;	MIC; 4.5 mV/(200~600Ω) AUX; 200 mV/47 kΩ
Output;	HEADPHONES; 32Ω
Dimensions (W×H×D):	648×175×250 mm
Weight:	5.8 kg without batteries

Design and Specifications are subject to change without notice.

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